

CHATTERBOX.



1908.

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DINNER-TIME.

Chatterbox

For 1908

FOUNDED BY J. ERSKINE CLARKE, M.A.



DANA ESTES & CO., 212 SUMMER ST., BOSTON.



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CHATTERBOX.



The Laughing Cavalier.

PICTURES AND THEIR PAINTERS.

From the Wallace Collection, London.

I.—THE LAUGHING CAVALIER, BY FRANS HALS.

THE picture of the 'Laughing Cavalier,' of which the original is in Sir Richard Wallace's wonderful collection at Hertford House, is by Frans Hals, the first of the great Dutch school of painters. He was probably born in 1584, a grievous year for Holland, since it saw the assassination of the Prince of Orange, William the Silent, the founder of his country's independence.

Holland was engaged in her great life and death struggle with Spain, from which her people, by sheer persistence and determination, came forth victorious and free. Frans Hals belonged to one of the military guilds, for to fight in his country's defence was the natural occupation of every Hollander, whatever other trade he might choose to follow. But the painter was by no means the typical hard-working, frugal Dutchman; his pictures, it has been said, were 'dashed in red-hot in a fine frenzy of inspiration,' and he was so reckless in money matters, so pleasure-loving and self-indulgent, that his earnings slipped through his fingers, leaving him always poor and in difficulties. We hear of his furniture being sold to meet the claims of a baker to whom he was deeply in debt; the city authorities sometimes paid his rent and provided him and his family with firing, and kept him from penury at last by a pension of two hundred florins. Yet he was a painter of very great power and originality, famous for his treatment of bright, clear light; a contrast to his great successor, Rembrandt, who loved brilliant gleams and deep shadow.

But the chief interest of Hals' pictures lies in the fact that he painted the life he knew and the people among whom he lived. If we would know what Holland and its people were like in the first half of the seventeenth century, we shall find them in the paintings of Frans Hals. In the Municipal Gallery at Haarlem, where he lived, his famous groups of the officers of the Guild of Arquebusiers cover the whole length of a wall: seven great pictures from which the gallant gentlemen look down upon us as they sit and stand round their banquetting-table. Very magnificent they are, with their slashed sleeves, their silken scarves and plumed hats, and the wonderful white ruffs which Hals painted so perfectly. We have another light-hearted, strong-handed Cavalier in our illustration, dainty in his attire, quite at home in jovial company, but ready also to draw a good sword in defence of the liberties of Holland. Hals has shown us his countrywomen too: ladies of high degree, and sturdy, hard-featured women of the people, as strong and self-reliant as their husbands and sons. And perhaps he is even more at home when he preserves for us the strolling musicians who enlivened the company at the taverns, where the painter's own earnings so quickly melted away.

That Frans Hals could appreciate an art very different from his own we know by the following pleasant story:—

It is said that the courtly portrait-painter, Van Dyck, passing through Haarlem on his way to

England, called at the house of Hals, and, without revealing his name, asked whether the artist could paint his portrait in a couple of hours, as he had only that time to spare. Hals agreed, and set to work in his usual rapid, brilliant fashion, to catch the likeness of the stranger. When the sketch was finished, Van Dyck, remarking that painting seemed easy work enough, asked leave to try his hand at a portrait of the artist, with the result that Hals, flinging his arms round the neck of his late sitter, exclaimed, 'You must be Van Dyck! No other man living can paint like that.'

Despite his many ups and downs, his changes from self-indulgence to starvation, Hals lived to be an old man. He was over eighty when he died, leaving behind him not only a series of wonderful paintings, but a faithful record of the age and the country in which he lived, and the people, high and low, who went up and down the streets of Haarlem three hundred years ago. His portrait is given on page 5.

M. H. D.

PUZZLERS FOR WISE HEADS.

1.—DECAPITATION.

I am a kind of grain. Behead me and I am not myself. Behead me again and I am a vowel. What am I?

[Answer on page 39.]

THE DOGE'S FAREWELL.

IN the days when the city of Venice really was the 'Queen of the Adriatic,' the quaint ceremony of the Doge's farewell to the adventuring fleet of merchantmen was a splendid sight. The city was given up to holiday. All along the sides of the Grand Canal the gondolas were drawn up like waiting crowds at a roadside. Decked with Italian flowers, and flying innumerable flags, they must have shown in brilliant contrast against the grey-walled palaces by which they were moored.

Presently, down the open waters within this avenue of boats came the gorgeous state barge, canopied by a silken awning, and rowed by some fifty oarsmen, none of whom could be seen, for the oar-blades were thrust through openings in the vessel's side. On its deck, which measured more than one hundred feet by twenty, stood the Doge himself, in the rich robes of office, surrounded by his councillors. As this vessel made its way seaward, it was greeted by bursts of music from the assembled gondolas, and when it had passed they followed respectfully in its wake, thus forming a long procession of brilliant colour. Arrived in the outer harbour, where the merchant fleet was moored, the state barge paused in their midst, while the Doge addressed the sailors, urging them not to forget the dignity it was their privilege to maintain, and wishing them a prosperous voyage. A blessing was then pronounced on their enterprise, and, the ceremony of farewell being accomplished, anchors were raised, sails were trimmed, and, amid a storm of cheers, the fleet stood out to sea. When they were fairly under way, the pompous *Bucentaur* (as the Doge's state barge was named) returned with becoming dignity to the shelter of the Grand Canal.

AN INDEPENDENT GENTLEMAN.

By the REV. E. E. BRADFORD.

'GOOD morning,' said my chum, Bob Standish, as I came down, a little late, and found him already at breakfast; and then without any pause he went on, 'I am going over to Stamboul this morning. Will you come?'

I sometimes wished that Bob was less independent. But that was the only fault that I had to find with him, for on the whole I thought him the best chum in the world. But on this one point he was certainly terribly sensitive; he always seemed to me to have such a horror of being patronised, or helped, or interfered with in any way, that he kept every one at arm's length in order to have plenty of elbow-room for himself.

How I came to be staying with the Standishes was in this way: Mr. Standish always had a wish to go for a sketching tour in Constantinople and along the Bosphorus, and my father, who is an invalid and cannot travel much himself, thought that, if it could be arranged in the Easter holidays, it would be a good chance for me to go too.

'I should like to go,' I answered eagerly to Bob, for we had only just arrived, and as we were staying at Skutari, I had seen little of Constantinople.

'All right then; I vote we start as soon as you have finished breakfast. I suppose we can get some lunch somewhere, and if we are back in time for dinner that will be soon enough.'

'Right you are,' said I, and a few minutes later I had gobbled up my breakfast, and we ran down to the landing-stage.

What a clever fellow Bob is! He had already got up a string of useful Turkish words, and could ask the way and pay for our tickets as easily as if he were an old resident. He knew all about the Turkish money, too, so he took charge of my money as well as his own.

'It is better for me to keep the money, because you are sure to have your pockets picked. You are the most helpless fellow in the world,' he said to me, laughing.

We soon arrived at the landing-stage close to the Outer Bridge—a bridge which is famous for the endless stream of negroes, Turks, Greeks, Frenchmen, and other Europeans, all in their national costumes, which pours across it.

Then we toiled up the hill to the grand old Cathedral, Santa Sophia—now, of course, turned into a mosque. I had an idea that you had to uncover your feet to go into a mosque, but instead of this I find you now put on a pair of over-shoes, which is certainly a great improvement.

Santa Sophia is so spacious and open that you can see nearly every part of it at a glance, without craning up your neck or turning your head round and round, and this gives you a kind of restful feeling, for though the whole effect is wonderfully grand, you do not feel as if you had to gaze about in all directions and make a terrible effort to understand it all. It just quietly impresses you with a sense of something vast and solemn, like the vault of the sky. And the great, shallow, saucer-like dome does not seem either to have any support or to need any. It

just seems to float in the air in the easiest and most natural way. And then the whole building is so wonderfully light. There is as much difference in this respect between Santa Sophia and St. Paul's in London, as there is between the sunny sky here and the foggy air of London.

We took so long admiring it that it was getting on for lunch-time when we came out.

'We shall have to cross over to Pera to get a decent lunch. That is where all the best shops and hotels are to be found,' said Bob, as if he had lived in Constantinople all his life. He had studied the guide-book to some purpose. 'It is so much better to learn it up for oneself, instead of being dependent on other people for advice,' he said.

We crossed the Outer Bridge to get over to Pera.

'Ah, here is the Grande Rue! That is the chief street, you know,' said Bob, as we saw it written up.

But, alas! as we discovered later, Bob had made a small mistake. On crossing the Outer Bridge, you come to Galata before reaching Pera, and there is a Grande Rue in both quarters. It was the wrong one down which we turned—about the very worst street in all Constantinople.

'The hotels do not look up to much,' Bob confessed, 'but it seems they are ripping places inside. Let us try one.'

My heart misgave me as we entered an evil-smelling den, but I had too much faith in Bob to dispute his choice. A dirty-looking waiter appeared, and asked, in very fair French, what we would take. Bob, who can speak French like a native, ordered the lunch, and we were soon served. Neither of us was very particular, and we found the food decent enough, though the plates looked dirty.

Under the circumstances, we did not care to linger over our meal, so we soon finished, and then, having paid our bill, we elbowed our way out. The crowd of customers round the door pushed and hustled us, and we had some difficulty in getting out.

But the worst of it was that when, some few minutes later, Bob happened to put his hand into his coat-pocket, he found his purse had gone!

'That is awkward!' he exclaimed rather ruefully. 'You do not happen to have any money on you, do you?'

I had none; I did not like to remind Bob that he had taken charge of mine as well as his own, for fear I should be robbed.

'What on earth shall we do?' he asked. 'We must have some money to pay the steamer back. I am afraid we cannot swim across the Bosphorus as Leander did across the Hellespont.'

'We had better go to the English Consul, tell him what has happened, and ask him to lend us some money,' I answered, cheerfully. It always seemed to me so easy and natural to fall back upon other people when one gets into difficulty from no fault of one's own, that I had no idea how distasteful such a course would appear to Bob's independent spirit. He fretted and fumed for a long while, but there was no help for it, and in the end we went to the Consul, whose office was not far away.

Of course, he saw at once that we were respectable boys; he laughed at our misadventure, and offered to lend us as much as we required. I should



"A dirty-looking waiter asked what we would take."

have willingly taken a *beshtik* or two more than we needed, so as to be on the safe side; but Bob, who seemed to be very vexed at having to ask aid from

a stranger, would only accept the loan of the exact sum required to pay our fare to Skutari.

(Concluded on page 11.)



FRANS HALS, THE PAINTER.

See page 2.

INSTEAD OF THE SUN.

I.—LUMINOUS ANIMALS AND PLANTS.

OF our five senses, the one which affords us most pleasure and instruction is that of sight; yet, without light, sight would be useless, since it has been proved that we see things only by the light which they give, or the light which they reflect. The great source of all light is the sun, and while it



Fig. 1.—Fire-flies.

shines man goes about his work or his pleasures, thinking little of the blessings which he owes to it. But when the sun sets, and darkness comes on, he feels a great helplessness, and studies how he may provide himself with some artificial light, which will, as it were, prolong his day, and make his life happier and more useful. At different times and in different places, men have attained this object in many various ways.

The first method of obtaining a light of which we will speak is, it is to be feared, little better than



Fig. 2.—Glow-worms, showing methods of feeding and cleansing.

stealing. Many lowly animals are able to produce a light, which is in some mysterious way part of their life and growth. The English glow-worm (fig. 2), which is really a beetle, is one of these, and it is rather strange that the female, which is without wings, gives a much brighter light than the winged male. The fire-flies (fig. 1) of tropical countries, of which there are scores of species, obtain their name from the glowing light which proceeds from four spots upon the body. Like the glow-worms, the fire-flies are really beetles, and they are so numerous in some countries that, as they flit from bush to bush, they give one the impression of a display of fireworks.

Charles Waterton, who spent many years in South America, tells us that one of the large fire-flies of that country affords sufficient light to enable a man to read his pocket-book when he holds the fly near it as a lantern. Waterton was a kindly man, and he is careful to remind us that, if we use a fly for such a purpose, we ought to put it back upon its bush when we have done with it.

The savages of many countries make use of fire-flies in this way. Some of the Indians of South America attach these insects to their hands and feet when they travel at night, and the women use them in their huts instead of any other light. The girls often bind them in their hair, and attach them as ornaments to their dresses. The Fijian women and girls also fix fire-flies in their head-dresses when they are going to take part in an evening dance, and no jewels could be more beautiful.

Not only do some insects give a light of this kind, but many plants are also luminous. Several kinds of mushrooms give out a faint blue light at night, and a traveller in Brazil found one kind so bright that a few of them, placed in a dark room, afforded sufficient light to read by. They were about the average size of our common edible mushroom.

Many mineral or earthly substances show a faint light in the dark. Phosphorus is one of these. When it is exposed to the air in the dark, a faint blue-greenish light is seen to surround it. The phosphorus is really burning in a very slow and gentle way, and the faint light which it gives off is described as a 'phosphorescence'; and this word is applied to any pale, glowing light which does not appear to give out any heat. The glow-worm's light, the fire-fly's light, and the light of the luminous mushroom are all 'phosphorescent.'

Phosphorus is a rather dangerous substance, as it takes fire even with the heat of one's fingers. For this reason it is always kept in water, and only taken up with tongs.

There are, however, other substances which are phosphorescent without being dangerous. One of these is a combination of sulphur and lime, and some years ago an inventor made from this compound a kind of phosphorescent or luminous paint, which was white in the sunlight, and shone with a faint blue light in the dark. It drank in the sunlight, as it were, during the daytime, and returned it again at night. A gateway or a guide-post, which was painted with this paint, was conspicuous by night as well as by day. Little match-holders are made luminous in this way, so that one could go straight to them in the dark. Some squares of cardboard were coated with the paint, and they shone in the dark after they had been exposed to the light. If a dark object, such as a penny, were laid upon the card when it was exposed; the portion of the card beneath it was protected from the light, and remained dull when the card was taken into a dark room, while the rest of the card was light; thus proving that the card simply shone by the borrowed light of the sun. Each of these cards was called 'a trap to catch a sunbeam, and when you see how it gathered up the sunlight and stored it away for use at another time, you will think that a very appropriate name.

W. A. ATKINSON.

THE LAND OF CONTRARIES.

WILL you sail with me in a magic boat
To the land of the pink canaries,
Where the sky is green and the trees are blue,
Where ink is sold in the dairies,
Where pigs catch mice and elephants fly,
And all things go by contraries?

You want to start this very same day!

Is that what I hear you saying?

But I warn you at once, before you go,

That you'll none of you dream of staying,

For the children, of course, in Contrary-land

Are allowed no leisure for playing.

A. KATHARINE PARKES.

THE CRUISE OF THE 'KING-FISHER.'

A TALE OF DEEP-SEA ADVENTURE

BY

H. DE VERE STACPOOLE,

Author of 'The Bottom of the Sea,' 'Cable Fishing,' &c.

Part Author of the 'Golden Astrolabe.'

CHAPTER I.—TEDDY O'BRIEN.

'OH! the captain sat in a commodore's hat,

And he lived in a royal way;

On sugar and figs and toasted pigs

He feasted every day.

And the gunner we had was apparently mad,

For he sat on the after rail,

And he fired salutes with the captain's boots

In the teeth of a rising gale.

Then blow, ye winds, heigh-ho, a roving we will——'

The singer, Teddy O'Brien, a boy of about fifteen, suddenly found himself sprawling on the grass. He had been seated on the stile that leads from the vicarage to the High Street of Meersham village, chanting the above ditty and fancying himself alone, when behind him had come Dick Marley, the vicar's son, an old schoolmate and crony.

Teddy was was so nicely balanced on the stile, and seemed so perfectly contented with himself and his surroundings, that the chance was too good to be lost, and with a well-directed shove, Marley had cut the singer short and sent him sprawling.

Next instant O'Brien was up, and Dick was running.

By the water-meadows he ran, O'Brien hot on his trail; then he headed straight for the vicarage garden. But he was much too good a sportsman to take shelter in the vicarage; through the garden he rushed, over a low wall and on to the high road, the insulted O'Brien snorting at his heels.

'Pax!' shouted Marley over his shoulder, and the answer came back, 'You just wait till I catch you!'

Through the sleepy little village the chase headed, down Potter's Lane and into the Twenty Acres. Here Marley stumbled and fell, with the infuriated O'Brien on top of him. O'Brien held him down as easily as though he had been a cat, for O'Brien had tremendous strength for his age, and science as well.

'Pax!' again cried the captured one.

'I'll pax you,' replied the other, taking his seat on

Marley's chest. 'What did you mean by knocking me off the stile, eh?'

'I didn't mean—ow! Get off my chest.'

'What did you mean by knocking me off the stile?' repeated Teddy, scientifically twisting his victim's arm. 'Will you apologise?'

'No!'

'Will you apologise?'

'Yes—ow!—I apologise.'

'Humbly apologise?'

'No—yes! there, let me get up. I say, you *are* a beast, you know,' continued Marley, getting on his feet and dusting himself. 'Look at my clothes?'

'Bother your clothes,' said Teddy, whose anger had quite disappeared. 'Come on and fly the box-kite I got yesterday; there's wind enough to send it up a mile.'

Teddy O'Brien's father was old Captain O'Brien, a retired American naval officer, who had inherited a small estate in England, where he had lived for the last sixteen years.

Teddy had been born in England, so he was not quite an American, and he lived with his father at Meersham, a village near Ravenglass, on the Cumberland coast. Marley was the son of the vicar; he was half a year younger than Teddy, and he was to be a doctor, so his father said, and he did not like the prospect at all. He wanted to go to sea.

O'Brien was at sea, second accountant on the cable ship *Kingfisher*, one of the vessels owned by the great deep-sea cable works of Roberts, Roberts & Co. Teddy had given vivid descriptions of his adventures at sea: of Pacific beaches where the surf always thundered; of cables which the *Kingfisher* had been sent to mend, and which lay so deep in the ocean that the finding of them alone took a month; of the strange things he had seen fished up with the cable, great masses of coral the size of your head, and once the sternpost of an ancient ship. Of these, and other things, O'Brien made such a story that it almost drove Dick wild to think that he would have to stay at home and do Latin and Greek, whilst his friend was roaming the world and having such adventures. To make matters worse, Captain O'Brien, who had influence with the telegraph works, had offered to get Dick a voyage for nothing, signing him on with the nominal title of assistant's assistant accountant. But Mr. Marley did not quite like the idea; Teddy was in his opinion too wild to take charge of Dick. 'Too irresponsible' was his expression.

They made now for O'Brien's home to get the box-kite, the flying of which that morning decided, strangely enough, the question whether Dick Marley was to go to sea or not.

CHAPTER II.—DESCRIBING A NEW USE FOR A BOX-KITE.

CAPTAIN O'BRIEN'S house was situated near the vicarage; a long, low, rambling house it was, fronted by a veranda and backed by what had once been a skittle-alley, but which had been converted by the captain into a shooting-gallery.

He was a dead shot and a keen sportsman; the moment one entered the house one became aware of the fact from the trophies of the chase on floor and wall. Tiger-skins, from Burmah; moose-heads,

from the Canadian North-west: brown-bear pelts, from Northern Norway; and—trophy of trophies—a gorilla from the Congo forests. A six-foot gorilla, with a chest like a barrel, and so perfectly set up and mounted that he seemed almost to breathe.

Every one of these things had fallen to the captain's own rifle, and every one had a story, more or less exciting, attached to it.

'Come on,' said Teddy, leading the way into the house. 'Come into my den—what's o'clock, ten? I tell you what, we shall have time to take the kite down to Ravenglass and get a boat.'

'What do you want a boat for?'

'Why, to harness the kite to, and see if it won't tow us. I read of a fellow the other day who went ever such a distance in a carriage drawn by a kite; well, if a kite will draw a carriage, it will pull a boat—see?'

Teddy's den, as he called it, was a small room looking out over the roof of the shooting-gallery. It was packed with nearly everything conceivable in the way of sporting gear: fishing-rods and landing-nets, ferret-muzzles, and what not, adorned the walls.

'Look there,' said he triumphantly, taking a huge steel hook attached to a chain from a drawer.

'What on earth is that for?' asked Marley.

'Sharks, my boy,' said Teddy. 'Out on the last expedition I got a shark-hook made by the donkey-man.'

'What's a donkey-man?'

'The man who looks after the donkey-engine and small steam-gear—and I hooked a shark with it too, but the beastly thing broke up, and the shark escaped; but this one will hold, I'm sure, for I had it made by Arrowsmiths, of Grantham, and if I don't bag a shark or two on the next expedition my name's not Teddy O'Brien.'

'I wish I was going with you on this next expedition,' said Marley; 'when does it start?'

'Less than a fortnight now, the twelfth or thirteenth of September. It will be no end of a jolly trip away down the Canaries, where bananas are cheaper than turnips, and you can pick prickly pears by the roadside. We are going to mend the Brazilian cable that's broken; it runs under the sea near there.'

'Don't talk to me about it,' said Marley; 'to think of your being down there, and I stuck here in this hole of a place, and I'm to have a private tutor to coach me up for this examination.'

'Look here,' said Teddy. 'If I tell you something will you keep it dark?'

'Yes, rather—spout away.'

'Well, my father is trying to get your governor to let you go with us.'

Marley's eyes sparkled.

'But the worst of it is,' went on Teddy, 'that your governor says I am not a sufficiently accountable party to take charge of your precious carcass; says I'm always leading you into mischief.'

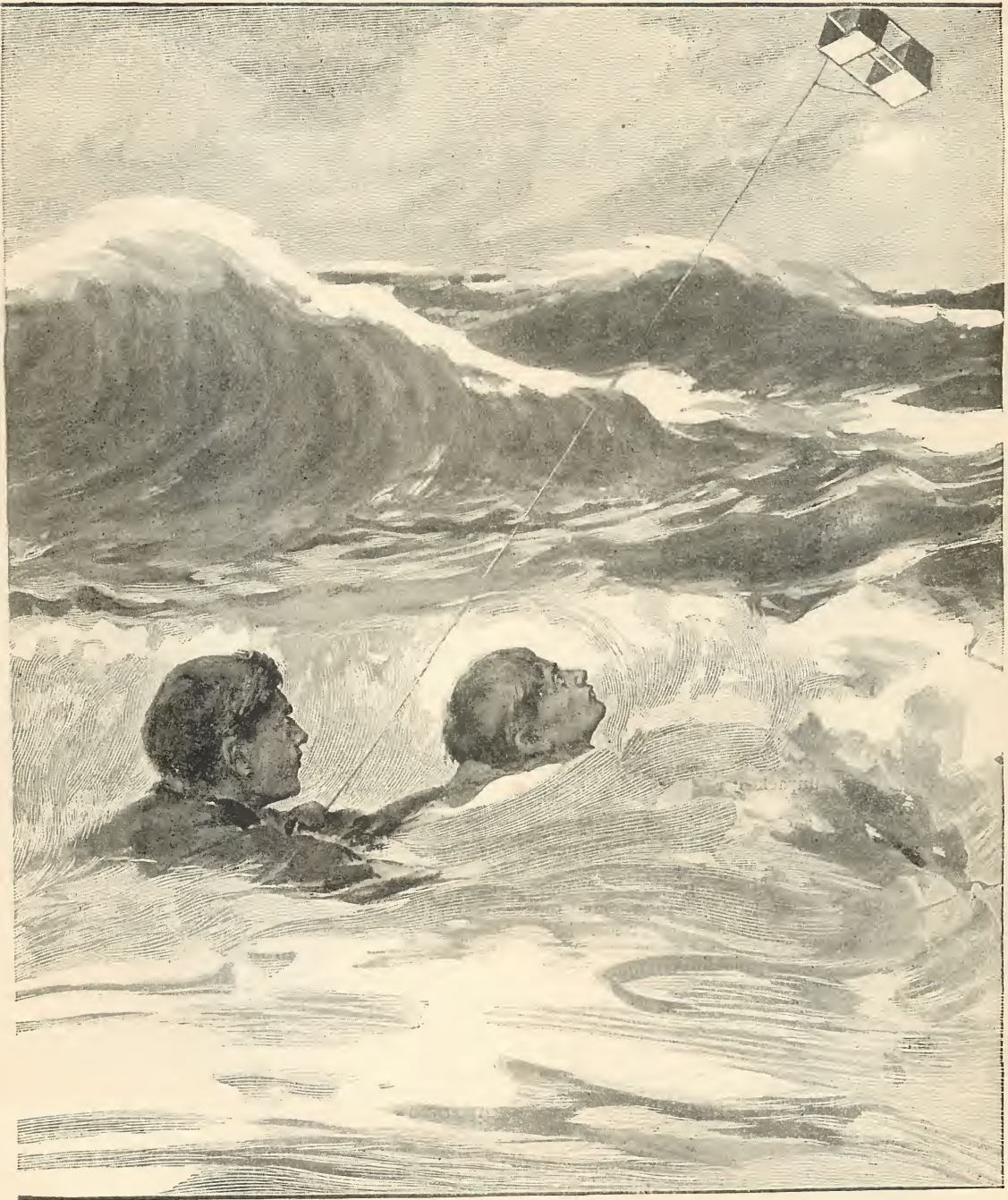
'Oh, botheration!' said Dick. 'Was there ever such rubbish? Ted, do you think there's a least bit of a chance?'

'Don't know,' said Teddy. 'If my governor can do it, he will; if he can't, he won't. Come along; here's the kite, collar the string, and don't you lose it.'

(Continued on page 10.)



"Teddy O'Brien suddenly found himself sprawling on the grass."



"It was a terrible experience."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 7.)

THE two boys came out by the front way, Teddy carrying the kite, fixed to its board, and made over the fields to Ravenglass.

Ravenglass is a tiny fishing village, situated just where the Esk meets the sea. Opposite it at low tide are acres of yellow sands; at high tide, a great shallow natural harbour, protected from the sea by a sand-spit.

This sand-spit is a great breeding-place for gulls; black-headed gulls, tern, shell-ducks, all have nesting-places here, amidst the bent-grass, and nearly all night long in the summer season you can hear their uneasy cries.

'Hurroo!' cried Teddy, as they reached the little boat-slip. 'Here's Jimmy Ferguson's boat beached, and there's some spears in her; we will do some flat-fish spearing. Now buck up, Dick, and help me float her—one, two, three, *shove!*'

'Master Teddy,' came the thin voice of a woman from one of the cottage windows, overlooking the sea, 'you're to leave that boat alone; Jim says she ain't safe.'

'Safe, my eye!' replied Teddy, who had got the old tub afloat, and was stowing the kite in the stern sheets. 'We're taking a kite with us, Mrs. Ferguson, and if she sinks we'll stick on to the kite—safe! she's as safe as I am.'

'He's uncaulked half the seams,' screamed Mrs. Ferguson, 'and only put in a temporary dressing. You'll be drowned.—Mary Jane, put on your hat and run up for the vicar—I see him walking on the upper road; maybe he will be able to teach them sense.'

'I say,' said Teddy, when they were out a hundred yards or so, 'she is pretty damp. Hand us the bailing-tin; that's right, now you get the kite up. Here she is, unpack her carefully, and I'll bail.'

A box-kite is very easy to fly on shore if you know the trick, but in a boat and with an inexperienced hand it is a different matter.

Dick got the sticks into the thing all right. There was a brave breeze blowing from the sea, but the breeze somehow refused to lift the kite or have anything to do with it, flinging it back right into Dick's face, and then right against the thwarts of the boat as if endeavouring to beat it in pieces.

'Chucklehead!' shouted Teddy, and before the word had well left his mouth, the kite, released a bit, and borne on a flaw of wind, literally made at him as if it were alive. In attempting to ward it off and save it from destruction, the bailing-tin, which he held in his right hand, went overboard.

'Now you've done it,' cried Marley.

And certainly he had.

The boat was leaking like a sieve, the tide was rising, the bailing-tin was gone, and in two minutes they must founder, for the water was coming in now at a horrible pace.

To cap the matter, Dick Marley could not swim.

But O'Brien, despite his recklessness, was a person

who did not lose his head in an emergency. He saw at once that the boat would be down before they could hope to reach the shore, but there was a little spit of sand ten yards away, and that would give them a temporary respite. He yelled to Dick to take the sculls and pull whilst he himself took the yoke-lines.

As the nose of the boat touched the sand-spit, the stern sank in the water with the gurgling noise of a submerged bottle.

'Safe, for the minute!' cried O'Brien, scrambling on to the sand beside Dick; 'but I'm thinking we're out of the frying-pan and into the fire, for the tide's coming in like a mill-race, and this bit of sand will be under water before you have time to sneeze. Here, take the kite and keep her dry till I think what is to be done.'

'Every fishing-boat is out,' said Marley in a despairing voice. 'There's not a boat in of any sort that I can see, and I can't swim a stroke—and, oh, there's my poor old governor they have fetched down.'

There, indeed, on the little boat-slip in the distance was old Mr. Marley, his white hair flowing in the wind; round him were gathered all the women of the village, but not a man—every man was off at the fishing. There was no boat to put off, no help of any kind for the two boys on the sand-spit—the sand-spit that was slowly vanishing and being swallowed by the rising tide.

Perhaps there is no death worse than what seemed to be preparing for O'Brien and his companion. The incoming tide was now fizzing on the last remnants of the hot sand, and Marley, with a sick shudder, felt a little wave lap into his right shoe. It was like a cold tongue.

Though O'Brien could have saved himself by swimming and leaving his companion, such an idea never occurred to him.

Yet, to stay with Marley was death to them both. Alone he might reach the shore, but never could he fight the tide-race burdened with a companion unable to swim.

'May God help us,' said Marley, and Teddy echoed the appeal. Never was prayer more heartfelt, never was response more rapid, for suddenly, as if inspired from above, an idea crossed the brain of O'Brien, and he gave a shout that echoed over the harbour and set the gulls wheeling and crying.

'Strip off your coat,' he cried. 'I will get you ashore yet—will you do as I bid you?'

'Yes, but I can't swim. You'd better leave me, Ted,' said Marley, who was very pale, yet managing to keep a steady voice. 'Save yourself whilst you have time. I'm as good as done for.'

'Will you hold your tongue?' said O'Brien, whose American-Irish temper came out when he was excited.

He took off the gymnasium belt he was wearing.

'I'm going to strap your arms to your side, for if I don't you will be flinging them up and drowning us both. Now, not a word out of you, there's no time for talking.'

In half a minute he had Marley's arms bound to his side, and not a moment too soon, for the water was now nearly up to their knees. Then the people

on shore saw a strange sight, no less than a boy just on the verge of drowning engaged in flying a kite.

The great box-kite flapped about for a moment, and then took the breeze, rising swiftly and steadily and pulling like a cart-horse. When it was safely up O'Brien tied the kite-line round his chest, seized Marley by the back of his waistcoat, and marched him out into the deep water. Five steps took them out of their depth and into the cold tide-race.

It was a terrible experience for Dick. During the first moment a wild impulse caused him to try and fling his arms up, but O'Brien's forethought stopped that. Then he knew of nothing but the cold swirling water, O'Brien's voice encouraging him, and the humming of the kite-line that was bearing them both to shore.

'Teddy O'Brien,' said old Mr. Marley, when the boys had landed in safety, pale and shaky, but not a bit the worse for their adventure, 'I always looked on you as a harum-scarum boy, getting into mischief and what-not; but you've shown yourself a man—yes, a man, with more than an ordinary man's courage and resource. And if your father still holds out the offer of a voyage for Dick in your ship—why,' concluded the old gentleman, 'I—perhaps won't say "No."'

As a matter of fact he gave his consent that night, when Captain O'Brien came over to smoke a pipe, and talk about the occurrence of the day.

'Let him have everything ready for a start,' said the captain, as he took his leave; 'for one never knows what moment the telegram comes for these cable jobs; and he will be all right with Teddy, and it will make a man of him. Good-night.'

(Continued on page 18.)

AN INDEPENDENT GENTLEMAN.

(Concluded from page 4.)

WE had spent some time in consulting as to what we were to do, and in finding the Consul, so the afternoon was wearing away when we got down to the Outer Bridge to find our boat. By good luck, as I thought, we saw a party of Englishmen on the bridge, chatting together.

'Let us go over and ask them which is the proper boat to take, shall we?' I suggested.

'No; don't be a fool,' said Bob, testily. 'What a couple of duffers they would think us! The steamers for Skutari start from the Outer Bridge. All we have to do is to get in; then the man on board will collect our money and give us tickets. I have read it all up in the "Guide." There is no necessity to bother strangers with silly questions.' So in we got.

When we were well started, and were threading our way down the beautiful Golden Horn, the man came round to take the money for our tickets. Bob held out our money. The collector, who spoke French, said that it was not enough. Bob stormed, and said he knew what the proper fare was to Skutari. The man laughed, and said that had nothing to do with the question, as they were bound for Kadi Keui!

Then there ensued a good deal of angry discussion; and, at last, a good-natured old Turk paid the difference. Just imagine poor Bob's humiliation! A complete stranger paying for us out of charity!

When we arrived at Kadi Keui we had a long walk home before us. We started off manfully, keeping as near the coast as the roads permitted. We soon came to a large block of barracks, on our left, and a large native cemetery on our right. Then, a little further on, we had to cross the cemetery. Just then Bob stepped on a loose stone, stumbled, and fell.

'Hurt yourself?' I inquired, as he sat huddled up in a heap without rising.

'It is my ankle,' he cried, in a voice of despair. 'I am afraid it is sprained!'

Here was a nice state of things. Bob could not walk a step, and as for my carrying him, it was out of the question; I could barely lift him. We sat down together by the roadside, the picture of despair. I do not know how long we were there—it seemed ages—but I believe it was really no great time before a young French gentleman passed, and took pity on us. He was as kind as a Frenchman can be, which is saying a great deal, and, as even he could hardly carry Bob all the way home, he went off to get us a carriage. Then I mustered up courage to 'improve the occasion.'

'I say, Bob,' I began, rather timidly, 'it seems to me your plan of being independent does not wash. Because we would not ask our way, we got into a low place in Galata, and got robbed. Since then we have had to be helped by the English Consul, by an old Turk, and by a young Frenchman. And yet if any fellow could get on by himself you could, for you have twice the brains of most of us. But you are too proud to ask for help.'

'Perhaps there is something in it,' said Bob.

'And, Bob,' I went on, 'if you ever do decide to let any one be a "help-meet" to you, though I might not be much use, yet as I am the first to apply for the post, will you take me?'

Bob only grasped my hand. But though he then said nothing in words, his life has answered since. And now that we are both young men, and rather ambitious ones, we fancy that with my money and his brains, combined, we may, with God's blessing, be able to do some good in the world.

BEDTIME.

I WONDER why, when Mother calls
Me in to go to bed,
Such lovely plans for 'make-believes'
Come popping through my head?

I think of really splendid games
With gun and spear and rod;
But off I have to go upstairs
To find the Land of Nod.

I wish ideas would only come
Quite early in the day;
Instead of waiting till they know
I haven't time to play.



Puss in Boots. Find his Master.



Jack and the Beanstalk. Find the face of the Giant.



Here are the three Bears. Find Silver-locks.

A PAGE OF PICTURE PUZZLES.

DESMIDS AND DIATOMS.

MANY readers of *Chatterbox* will remember an account of some extremely small and very lovely creatures belonging to the animal kingdom and known as the *Radiolaria*, or Rayed animals, and

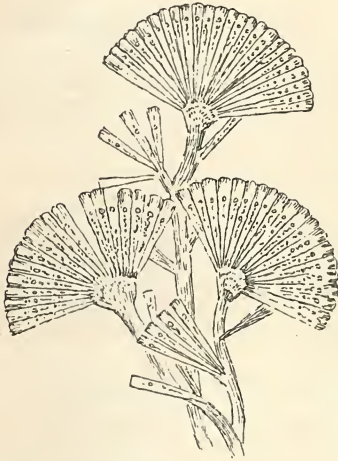


Fig. 1.—Fan-shaped Diatoms.

the *Foraminifera*, or Hole-pierced animals: creatures which, in spite of their minute size, played a very important part in building up this earth of ours. In this article I want to trace the main outlines of



Fig. 2.—Spindle-shaped Diatom.

the history of some equally minute and lovely members of the plant-world, which, like the tiny microscopic animals just referred to, are remarkable for their exquisite beauty and the no less important part they play in the scheme of Nature. These are known as the Diatoms and the Desmids.

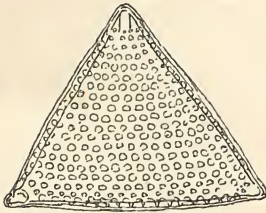


Fig. 3.—Triangular Diatom.

existence is generally unsuspected.

Let us begin with the Diatoms. In the first place they are remarkable for the fact that though the living portions of their bodies consist only of a minute blob of jelly, this jelly has the power of

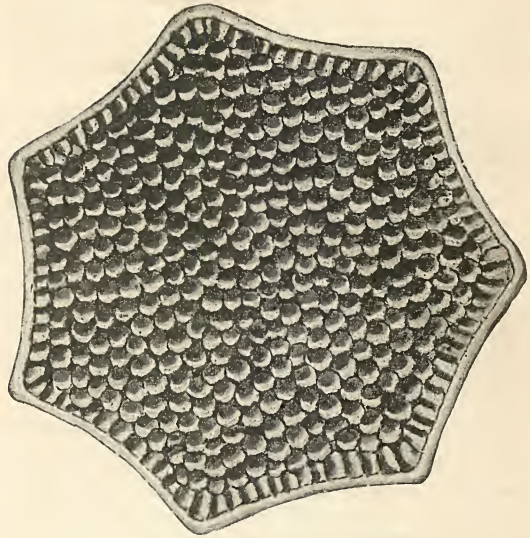


Fig. 4.—Seven-sided Diatom.

forming a skeleton of the hardness of a flint stone—and hence it is said to be made of ‘silica’—and of exquisite beauty. As to this last point you may, in a measure, judge for yourselves by a glance at our illustration. It is not, as you will notice, by any means a uniform style of beauty, for these creatures assume a wonderful variety in this matter; thus some take the shape of fairy-like fans (fig. 1), others are spindle-shaped (fig. 2), and others again shaped like triangles (fig. 3). Fig. 4 shows a seven-sided diatom whose surface is most exquisitely sculptured.



Fig. 5.—Maltese Cross Desmid.

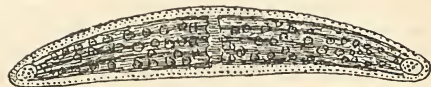


Fig. 6.—Horn-shaped Desmid.

But it is not till after death that the beauty of the diatom can be seen. When the once-living jelly has been washed away, the glassy skeleton appears in all its glory. We say in its ‘glory’ intentionally,

for the whole surface is most exquisitely sculptured with lines, or tubercles—that is to say, tiny bead-like swellings, of such a degree of fineness that even when most highly magnified it is not always possible to determine their true characters.

We know that diatoms are plants because they feed after the fashion of plants, drawing all the nourishment they want from the mineral salts and carbonic acid contained in the water in which they dwell—for the frail creatures live only in water. An animal, you may remember, can live only so long as it can obtain a sufficient supply of oxygen, and of the bodies of other animals or plants.

Diatoms increase their numbers by a curious kind of budding. When full-grown and full-fed, each diatom sends out a sort of bud which soon grows into a complete diatom attached to its parent, and as soon as its growth is complete it breaks away to bud again in its turn.

This multiplication takes place with amazing rapidity; so much so, that it has been estimated that from a single diatom, during the space of one month only, there may be produced no less than a thousand million (1,000,000,000) individuals! We can readily understand that at such a rate of increase, minute though they be, they colour the water in which they float and afford abundant nourishment to hosts of small animals. No wonder that their dead bodies, mixed with earth and other matter, should form deposits of mud so thick that, in certain parts of the world, hundreds of pounds have to be spent yearly in keeping an open passage at the mouths of rivers to allow the entrance and exit of ships.

Thus, frail though these tiny plants may be, they can yet harass even man himself! In some parts of the world these dead shells form layers of earth many feet in thickness, and this earth is put to very remarkable uses, for not only is it used in making glazed paints and steam-pipe casings, but, in the form known as Diatomin, or Tripoli slate—because first obtained at Tripoli—for polishing metal, glass, and marble. Further, and stranger still, it is also used in the manufacture of that terrible explosive, dynamite! So that man himself is often blown to atoms through the agency of bodies so minute, so tiny, so insignificant, that but few of us are aware of their existence, and then we can only discover them by the aid of the most powerful microscope!

When this diatom earth, as it is called, has been subjected to great pressure, it becomes hard rock, such as the Tripoli stone, or 'slate' just referred to. In the British Museum of Natural History at South Kensington is a block of stone of about two cubic feet in measurement, which contains no fewer—probably more—than twelve billion (12,000,000,000,000) separate diatoms! What then must be the number scattered over an area of forty-eight thousand miles over the floor of the Antarctic Ocean?

Diatoms are found both in fresh and salt water, so that those of my readers who have friends who possess strong microscopes should beg an opportunity of seeing what these wonderful plants are like.

Finally, a word about Desmids. Lowly plants, very nearly related to the diatoms, the desmids

present neither so rich a variety of shape nor so wonderful a skeleton. They have, indeed, no durable hard parts, but nevertheless they are very beautiful, as you may see in the star-like Maltese cross (fig. 5), or the curious horn-like specimen in fig. 6.

W. P. PYCRAFT, F.Z.S., A.L.S.

WON BY A PLOUGH.

AT first sight a certain Sussex church seems to stand rather strangely isolated amid some ploughed fields, though a pretty legend of true love tells us it was once situated in a corner of a beautiful park. Many years ago a Squire of Plumpton wooed a nobleman's daughter, whose father refused his consent to her marriage.

After a long time, worn out by the would-be bridegroom's importunities, and never dreaming that the young man would sacrifice one of the chief beauties of his extensive estate, the nobleman gave consent on the seemingly impossible condition that the wedding pair should walk over ploughed fields to the church.

Full of joy, the delighted young Squire at once gave orders the stately trees should be felled and the greensward turned up, and, when the church stood in a wide belt of acres upon acres of freshly-turned soil, gaily led to it the happy bride won by a plough.

TWO ROYAL MARGARETS.

I.—MARGARET OF SCOTLAND.

FAR away in Hungary, at a palace called Alba the Royal, there was born, more than eight hundred years ago, a little princess, who received the name of Margaret. She was not a Hungarian princess, but of the Royal Saxon line of England. Edmund Ironside was her grandfather, and on his death, her father, who was then but a child, had been sent by the usurper, Canute, to Sweden in hopes that King Ólaf, Canute's half-brother, might put him to death. Ólaf, however, was too tender-hearted to do this, and sent the little boy to the King of Hungary, who brought him up with his own children. When he was a man he married a German lady, Princess Agatha, and they had three children, a son called Edgar, our little Margaret, and another little daughter, called Christina.

When Margaret was about ten years old a letter came from her great-uncle in England, King Edward the Confessor, who had succeeded Canute, to ask her father to come back to his native land, as he was now heir to the crown; so the three children left Hungary with their parents. It is a long journey from that country to England now-a-days; but what must it have been then, when there were no railways, and when people travelled mostly on horseback? They must have spent weeks on the way, and when at last they arrived at their journey's end a great sorrow was in store for them, for their father died only two or three days after he reached London.

King Edward and his wife, Queen Editha, did their

best to comfort the poor widow, who must have felt very desolate, left alone in a foreign land with three fatherless children to bring up. The little Princess Margaret was a very clever child, fond of study and of books, and as she grew up she became more and more anxious to seek the highest and best things in life; for the old chronicle tell us that her chief aim was 'to seek to serve God perfectly,' and in order to do this she diligently studied the Bible, and although she was a princess she led a simple and quiet life.

Meanwhile another stranger took refuge at the English Court. This was Malcolm Canmore, son of the murdered King of Scotland, who had fled from his native country in order to avoid his father's fate, for these were rough and dangerous times for kings and people in authority.

By-and-by he was restored to his father's throne, and soon after the good King Edward of England died; and when the Norman King William took possession of the country, Princess Agatha and her three children had in their turn to fly.

Remembering the happy days spent in Hungary, they determined to return there, and Princess Margaret doubtless looked forward to a life of peace and to a quiet retreat from worldly affairs. There was other work for her to do, however, and such stormy weather arose that the ship in which they sailed for Hungary was driven out of its course, and forced to make for the coast of Scotland.

Once more the royal party found themselves 'strangers in a strange land;' but this time Margaret had found a home for life. Henceforth she was to belong to the Scottish nation, and to spend her life trying to bring learning and refinement to the rude people among whom her lot was cast.

The place where she landed is still called by her name, 'St. Margaret's Hope.' Once again they found refuge at the Court, for Malcolm, who had not forgotten his visit to England, sent for them to his Royal Castle of Dunfermline, as soon as he heard of their arrival. There his former friendship for Margaret soon deepened into love, and after some scruples on her part, for she still clung to her idea of living in retirement, they were married.

Scotland at that time was a somewhat dark and uncivilised country. The people were very wild and very ignorant. Even King Malcolm could not read, and this gentle wife of his, who had lived in more enlightened lands, did much by her influence to bring into fashion gentler ways of thinking and better ways of living. Her influence for good must have been very great, for we read that 'in her presence no one dared to say or do aught that was wrong.'

Her husband loved her deeply and took an interest in whatever she cared for, so that gradually the Court became more cultivated than it had ever been before, and the example of the nobles soon spread over the country. The Queen took care to maintain her husband's dignity; she encouraged the nobles to dress as became their rank, and for this purpose she brought merchants from other countries to sell their goods in Scotland, where such fine materials had hitherto been unknown. She also introduced the custom of using gold and silver cups and dishes at the royal table.

But while she busied herself in caring for her husband's royal state, she also found time to attend to the poor, as well as to superintend the education of her eight children. She would not allow her children to be indulged, but urged the governor of the royal nursery to punish them when they deserved it.

She was like a mother to the poor. Any one in trouble could go and lay his grievance before her. This privilege attracted great crowds to the palace, and there is still a stone on the road to Dunfermline which bears her name, and which tradition says she used to sit on to receive those who needed help.

With her own money she supported twenty-four poor people, and besides this, three hundred people were fed daily, at certain seasons, in one of the halls of the palace, where the King and Queen waited on them themselves.

At last, after reigning thirty-five years, Malcolm and his two eldest sons, Edward and Edgar, went to fight against the English, leaving Queen Margaret lying ill in Edinburgh Castle.

On a dark November day, Edgar returned bearing terrible tidings. His father and brother had been killed in battle, and had been hastily buried at Tynemouth. On entering his mother's room and seeing how ill she was, the Prince dared not tell her the worst; but, in answer to her questions, replied that his father and brother were well. But the dying Queen knew by his downcast look that he brought bad news. 'I know it, boy—I know it. Tell me the truth,' she said. And the young man told her all.

She bore this last trial with great patience, thanking God for this last affliction which He had been pleased to lay on her; but the blow was too much, and in a few hours she was dead, leaving to Scotland the memory of a saintly life, spent in serving those around her.

She was buried in the Abbey of Dunfermline, and the bodies of her husband and son were brought from Tynemouth and laid beside her. Three of her sons, Edgar, Alexander, and David, lived to become in turn Kings of Scotland.

THE HAUNT OF THE HERON.

WHERE softly the wind through the branches
is blowing,

And solitude reigns in a kingdom of rest,
Where bulrushes grow and the waters are flowing,
Ah! that is the haunt that the heron loves best.

He stands all alone, like a sentinel, keeping
His watch for awhile, at the close of the day,
But when o'er the meadows the shadows are creeping,
Then home to his nestlings he speeds on his way.

Where sweet is the musical sound of the river,
And few are the footsteps that come to molest,
Where, swayed by the breezes the bulrushes quiver,
Ah! that is the haunt that the heron loves best.

MARIAN ISABEL HURRELL.



The Haunt of the Heron.



“‘The telegram has come!’”

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 11.)

CHAPTER III.—PREPARATIONS.

THE delight of Dick Marley, when he heard next morning the news that his father had to tell him, was almost equalled by the delight of O'Brien when he, in turn, learned the tidings.

A voyage with Dick on board would be twice as lively as a voyage without him; for the crew of the *Kingfisher* was mostly composed of middle-aged men, not up to much in the way of jokes, and time had often hung heavy on Teddy's hands at sea, with no one to speak to of his own age.

A whole lot of preparations had to be made, and made quickly, for, as Captain O'Brien said, in cable work one never knows at what moment the call comes, and though an expedition may be fixed to start on a certain date to mend a deep-sea cable, the Government or Cable Company who owns it may be in a sudden hurry, and the expedition has to start, and start in a hurry, too—sometimes at twenty-four hours' notice.

Dick's cap and an old suit of clothes was sent up to Silver's, the outfitters, and back in two days' time came a suit of blue navy serge, with brass buttons adorned with anchors, and a cap with the Roberts badge, an overcoat cut in the Naval Reserve style—an outfit, in short, all complete.

Nothing remained now but the order to start, and as day after day passed without word from the Company, Dick began to feel that the order never would come.

Teddy, who was more used to the Company's ways, did not trouble; besides, his time was too much occupied with preparations. He was taking a Kodak camera, some deep-sea fishing-lines, his rook rifle, a saloon pistol firing bulletted caps, to say nothing of the redoubtable shark-hook on its yard of chain. The cleaning and fixing up and packing of all these things took time; then there were his ferrets, which had to be provided for during his absence, his rabbits, and a host of minor details.

The long-range rifle-shooting season on the range just across the Æsk was on, too; and his spare time was pretty well occupied on it, either watching the shooting or helping to score in the target-pit.

Still, when the ninth and tenth and eleventh of September passed without a word from the Company he began to feel a bit uneasy in his mind. Could anything have happened, and was the expedition, as Dick Marley gloomily conjectured, 'off'?

CHAPTER IV.—THE MYSTERIOUS TRUNK AND THE TWO SPANIARDS.

'Dick! Dick!' cried a voice from the vicarage garden early on the morning of the twelfth; 'rouse up, you lazy old mud-turtle! d'ye hear?'

A pebble banged against the window, and then another, as Dick jumped out of bed, opened the sash, and looked out.

O'Brien was waving something in his hand.

'The telegram has come! We must be off to-day. Tumble into your togs, and look sharp! Father says

we must leave by the ten-ten from Ravensglass. Got all your gear packed?'

'Yes, days ago. I will be down in two secs.'

'Well, I'm off back to get breakfast. Meet you at the station.'

And O'Brien rushed off home whilst Marley dressed.

Now that the sailing orders had come, now that he was really going to sea, he did not feel in such good spirits as might have been expected. Though he little knew the strange adventures before him, he felt that he was entering a new life, going into the unknown, where everything would be different from what he had hitherto experienced.

And he could not eat, though Hannah, the cook, had made him an omelette for breakfast, and sent up a huge pot of strawberry jam.

'Dick, my boy,' said old Mr. Marley as they walked to the station, 'I am not going to burden you with a heap of good advice, which you would be sure to forget. You are going amongst foreigners. Act amongst them as you have always acted here at home, and I'll be content. Bless me, there is the train signalled.'

Captain O'Brien, an old gentleman with a red, clean-shaved, cheery-looking face, was on the platform with Teddy and a pile of luggage.

'Alohy!' shouted the captain, when he saw them on the road; 'train's sighted. Come up the steps by the bank; it is a shorter cut. I have the tickets.'

The train drew up just as Dick and his father reached the platform, so there was little time for saying 'Good-bye' by the time the luggage was disposed of.

'Father!' yelled Teddy, as they were moving out of the station, 'did you remember to put the shark-hook in my portmanteau?'

'Ay, ay!' shouted the captain; 'it's in safe enough, and just you remember—'

But what it was he had to remember Teddy never found out, for the train at that moment turned a bend, and the captain's voice was cut off.

'Dear old Governor,' said Teddy, turning from the window and executing a double-shuffle on the floor of the carriage (they had the compartment to themselves), 'he's given me a big tip over and above travelling expenses. We'll have a good old time. I vote we go to the Hippodrome to-night; there's a ripping show on there, with a storm, and a ship that sinks, and a raft with a lot of shipwrecked Johnnies starving to death on it. How much have you?'

'Three pounds,' replied Dick, fetching them out.

'Put them in your pocket; I'll stand treat,' said the lavish O'Brien. 'There's no end of things to be done.'

And at Carnforth, where they had to change carriages, he began to prove his words by laying in provisions at the refreshment-room, and purchasing at the bookstall an armful of illustrated papers.

'I say, I wish you wouldn't,' said Marley. 'Let me pay for the papers.'

'Put your money up, my young friend,' said Teddy, assuming a paternal air. 'You haven't seen half what you're going to see yet.'

'We are going to stay at the Charing Cross Hotel, aren't we?,' said Marley.

'Yes. It's no end of a jolly place; all big looking-glasses, and soft carpets, and electric light. And I know all the waiters there, for I've been there twice before; and, take my tip in this, always go to a place where you are known, my boy.'

At Euston, much to Teddy's disgust, they had to take a four-wheeler instead of a hansom cab, simply on account of the amount of luggage. Dick had a portmanteau, a small Gladstone bag, and a trunk.

'I hate driving in a growler,' grumbled O'Brien. 'What did you want to bring so much luggage for—what's in that trunk?'

'I don't know,' said Dick. 'Hannah packed it: clothes and things, I suppose.'

'It's an awful weight,' said O'Brien, as he watched the men lifting it. 'I believe you've brought it by mistake; anyhow, we will see what's in it when we get to the hotel. Charing Cross Hotel, driver, and look sharp.'

'Ay, ay, Capting,' said the driver of the four-wheeler, making allusion, no doubt, to Teddy's naval get-up, and with a wink at the porter, he whipped up his scarecrow of a horse, and they started for the hotel at, as Teddy expressed it, the rate of three knots an hour. (Continued on page 30.)

PUMPS AND FIRE-ENGINES.

'WHO would think that *I* have a history?' says the old pump in the cottage garden. 'Here have I stood for a hundred years, always willing to draw up water from the well for any one who will just shake hands with me. I have quenched the thirst of boys and girls in days too long ago to remember, and yet they never once said, "What tale have you to tell?"'

But the pump could have told them a good deal. Of course it is only a very humble member of the Pump family, but there are others of its relations who fill important places in the world. One of its first ancestors was made by the great Archimedes, and consisted of a long tube bent into a spiral, something like the spring of a Jack-in-the-box. One open end of this was put into the water at a slope, and when the whole thing was revolved the water slowly climbed up the coils and poured out at the top end.

But the ordinary kind of pumps (called piston pumps) began business among the Romans about two hundred years before the Christian era. When you push a pump-handle down it pulls up the plunger on the end of a rod hanging in the pipe which reaches down into the well-water. The plunger fits the pipe so exactly that in rising it exhausts the air beneath it, and the weight of air in the well presses on the surface of the water and compels it to rise in the pipe.

The scoop-wheel pump is represented by a model at South Kensington Museum. Unlike the fire-engine pump, this wheel can only raise water as high as its own axle; but it does it very easily. The water enters through openings in the circumference of the wheel, flows down the curved, spoke-like divisions to the axle, and out through another opening there. As each chamber communicates with this central opening, the flow of water is pretty regular, whereas

the stand-pump can only give it out in jerks, for its 'bucket,' or plunger, has to go up and down with every stroke.

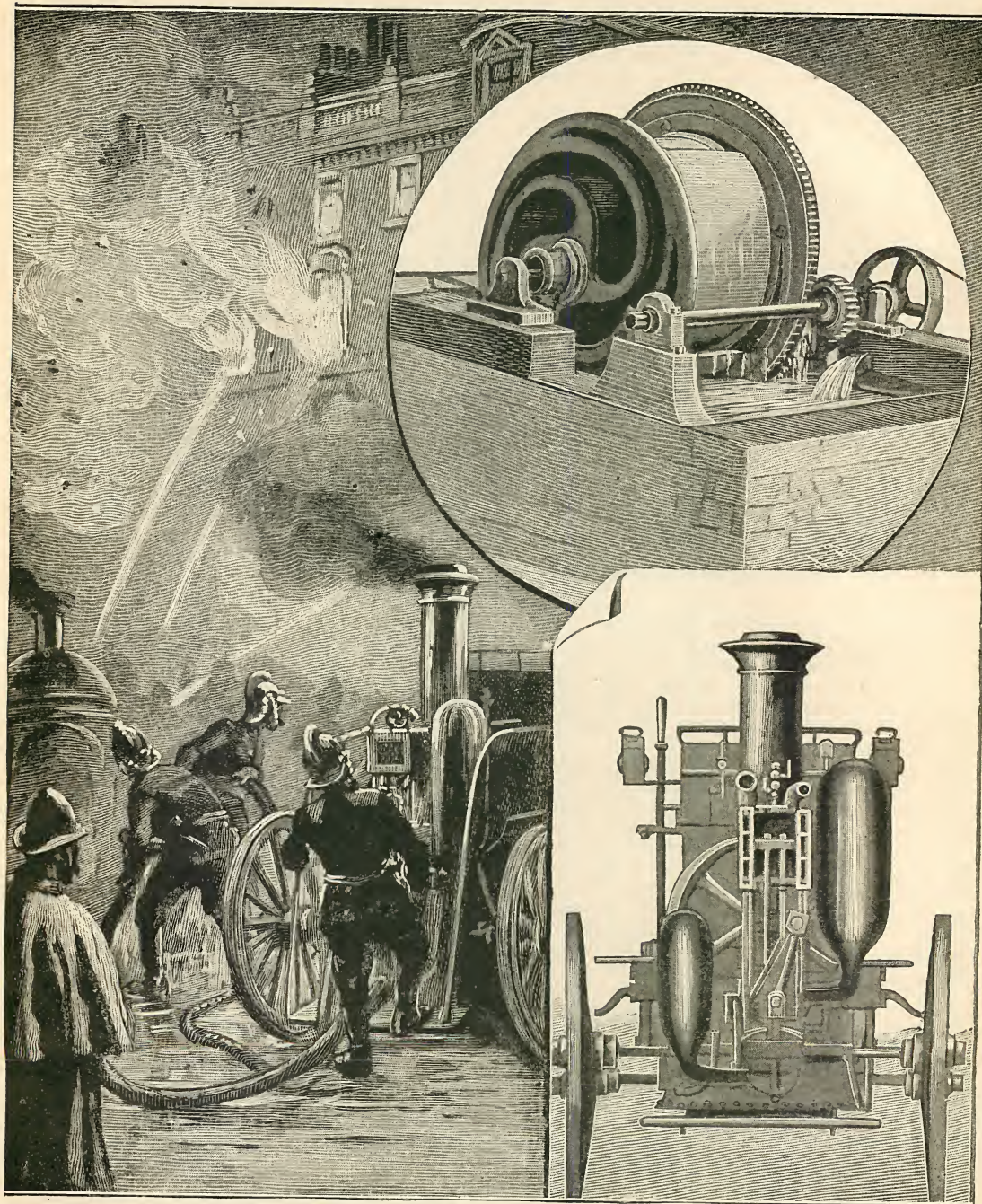
The fire-engine pump is a nearer relation of the common pump than the scoop-wheel, and better than either of them in performing its duty. It would never do, when some terrible fire is raging, for this pump to throw water by fits and starts. So it is fitted with an air-chamber, and is worked by steam-power. The air in the chamber is compressed with every throb of the piston, and so keeps up a steady pressure in expelling the water along the hose. That is why you always see it coming out in a constant flow.

When a fire broke out in the streets of ancient Rome, there were no galloping horses, with bright brass engines; no curling lengths of hose for steam pumps to drive the water through in a shining column above the highest roof; but a number of men would come running up, each with a leather bag under his arm. The leather bag was full of water, and when pressed would squirt it out through a short pipe, to reach the flames—if it could.

The steam fire-engine as we know it, was invented in 1829, by John Braithwaite, and fought its first battle with the flames on February 5th, the very next year, when a fire broke out in the west end of London. Perhaps through want of practice, it was not entirely victorious, and the Argyle Rooms, where the fire had broken out, were destroyed. Little more is heard of the steam fire-engine for thirty-three years, when, in July, 1863, a grand display was held at the Crystal Palace. A large number of engines were sent to this exhibition to show their various powers, and the first prize was secured by a fine engine made by Mr. Merryweather. Two years later the London Fire Brigade was established, and since that time the steam fire-engine has been alert for duty at the first stroke of the alarm gong, whether it sounds at midnight or at midday.

A model in the South Kensington Museum shows the form of engine now used, and on examination none could doubt that it is fully equipped against all the chances of a fire. In the long central box, upon which the firemen take their seats when called to duty, the delivery hose is kept. The box seat also contains all necessary tools, while on either side of it are hung two short branch pipes with metal nozzles. The two great suction hoses (that is, the pipes through which the water is drawn from the street main), hang below the fireman's foot-board, and all can be detached at a moment's notice. The whole is drawn by two powerful and fast horses, and a special manner of harnessing them to the pole is adopted, so that should one of them by some mischance fall down, it can be instantly released.

The great object in all these arrangements is, of course, the saving of time, and to secure this still further, every fireman is well drilled in his own particular duty. When the gong sounds there is no hesitation, no wondering what ought to be done, or who ought to do it, no jostling and no confusion. The horses, always ready harnessed, are brought out; the fire under the boiler is replenished; every man is at his post, and often before the alarm gong has ceased its noisy summons, the horses' hoofs are thundering through the streets.



Fire-engine at Work.

Scoop Pump.

Fire-engine—section.

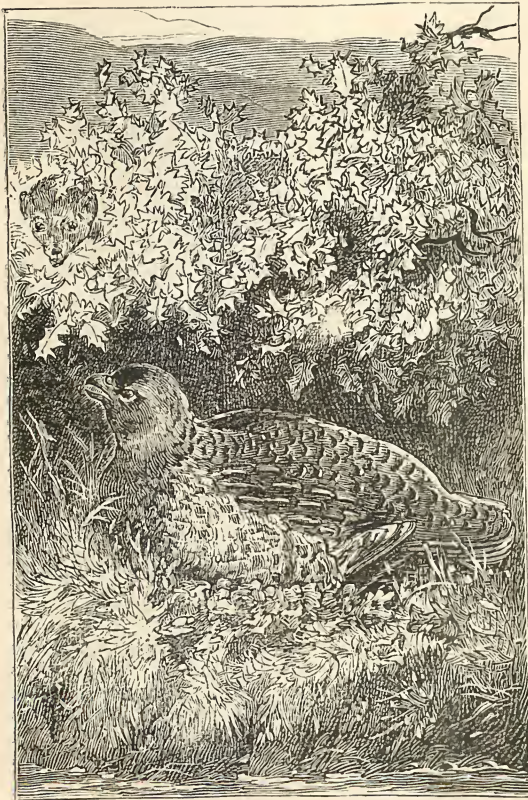
There is in our national fire brigade an army of more than thirty thousand men ready to fight the flames. In London alone, some four thousand fires break out every year, and to cope with these there were in

1906 seventy-five land-stations, five others built on river barges, and eighteen street or sub-stations, besides many fire-escapes kept at different places, and engines worked by hand.

FROM SPRING TO AUTUMN IN A PARTRIDGE'S LIFE.

MRS. PARTRIDGE was only ten months old when she chose her mate. She made a nest in the side of a ditch, and laid eight eggs in it, while her spouse kept guard from a clump of coarse grass close by.

Her first trouble was when Mr. Fox came along. He knew that partridges choose their nesting-places half-way down the bank of a ditch, with a thick hedge running alongside, and he trotted slowly down the hedge, poking his nose into every nook. But he did not see Mrs. Partridge, because her feathers were the same colour as the clay of the ditch, and she lay very close and still. It was an anxious moment, however, for the bird; she remembered how a cousin of hers had been seized on her nest by Reynard, and,



"It was her old enemy, the weasel."

rather than forsake her eggs, had allowed herself to be dragged away by him. Mr. Partridge, seeing his mate in danger, sought to divert the fox's attention by pretending to be hurt in the wing, and unable to fly; he hung his wing as if in pain, and flapped through the grass right in front of Reynard's nose. Mr. Fox made a dash for him, and the bird led him a

dance to the opposite side of the field, where he suddenly found his wing was quite well!

After this Mrs. Partridge felt quite tired, and tried to sleep. But there was a pair of wicked eyes watching her through the thorns: she gave a violent start when she saw them, for it was her old enemy, the weasel. He was a patient enemy, for he sat there



"Sitting round, tail to tail, so as to be able to scent danger."

all the night, with nothing of him visible save his two glaring green eyes, watching Mrs. Partridge, in the hope that she would leave her nest for a minute. He was very fond of eggs, and very hungry, and he knew the mother-bird had chosen her nest in the ditch because she *must* have water to drink. Sooner or later, he knew, she would fly down to the brink for a draught of water.

Mrs. Partridge was kept awake all that night, and although she felt very thirsty the next morning she dared not go down to drink, for Mr. Weasel was still watching her. But just in time her mate appeared, and offered to take her place while she quenched her thirst. Then Mr. Weasel went off in disgust.

It had been fine sunny weather until that day, but now it began to rain. Towards night the water in the ditch was visibly rising. The thoughtless owner of the estate had neglected to drain the nesting-grounds sufficiently, and there was no outlet for the flood. It rose inch by inch, until at last the water, swirling by,

crept into the bird's nest. She was already drenched by rain from overhead, and now her nest was rapidly filling with water so cold that it robbed her eggs of their warmth. She knew her brood was doomed, so, with a great piping cry of distress, she rose in flight, and deserted her nest. If only the owner of that ditch had taken the precaution of draining the neighbourhood he would have saved the frightful waste of bird-life that happened that day, for all along the ditches there were dozens of flooded nests, and the poor birds had to begin nesting over again.

Mrs. Partridge persevered till she found another nice nesting-place, however, and this time she managed to hatch another brood of eight fine chicks. It was drier weather now—so dry that the ditches were almost empty. But the grass in the fields was high, and the mother took her young into it to try their wings.

She flew away from them a short distance; then settled till they overtook her. She taught them to pay attention to her warning note, a shrill sharp cry, when a hawk or carrion crow came overhead. Once the mother's quick eye saw the hawk high in the sky aloft; immediately she uttered her cry of alarm, and her young ones buried themselves so quickly and so cunningly in the long grass that the hawk was baffled, and flew away.

Once a man came tramping across the field. He saw the chicks, and said: 'Now I have you, my little beauties!' but a moment later they had darted in different directions away from under his feet, and, search as he would, he could not find them. After this fright the little ones were taken by their mother to some sweet herbs, in seed, which was quite a treat for them. And then—they began to feel thirsty!

Oh, if the owner of that field had but thought a little about the wants of his birds! A shallow pan, placed here and there along the hedge, and regularly filled with water, would have been a precious gift to them. Mrs. Partridge knew the ditch was empty, so she led her brood a long way across the fields, and through a wide wood, in search of water; but all the streams were dry. Presently one of the chicks lagged behind, its mouth agape with thirst; then it sank into a deep crack in the parched clay, and died.

Over the fields, in the squire's garden, people were gaily playing tennis, and saying how glorious the weather was; the squire was planning a shooting party in the autumn, and saying: 'Over there are the partridges, brood upon brood of strong growing birds, that will make fine sport for us presently!' But Mrs. Partridge's chicks were dying of thirst, and he did not think of helping her.

When the rain came at last, she had five chicks left. These slept in the field at night, sitting round in a circle, tail to tail, so as to be able to scent danger from whatever quarter it might come. The father-bird was the sentinel, and directed their flight, alike in safety or danger. At his cry the young arose, he took his place at their head, and the mother came last of all. When the autumn came they were a happy covey of seven.

It was a glorious time they had in the corn-fields. They did not attack the sheaves, but gleaned in the open spaces between, picking up stray ears. Every few minutes they swallowed a small stone, to help

their digestion. The corn made them very sleek and fat, so that by the time September came they were plump and ready. But, alas! of the whole family only two of the chicks survived the autumn's shooting, and these paired with a neighbouring covey in the spring, and went through a round of adventures similar to their mother's.

FROST-FLOWERS.

THE frost came to my window-pane last night,
And drew upon it lovely forms and bright,
Fashioned like flowers, with many a graceful turn,
With petals some, some fronded like a fern.

Flowers out of frosts—beauty from cold and chill,
Oh, be it mine to learn this lesson still:
To find some good, e'en in what hurts and stings,
And fashion it to fair and lovely things.

A GIRLS' PARTY.

'IT'S sure to be a stupid party,' sighed Ronald Jameson to his mother. They were going out to tea, and Ronald did not want the hot, dusty walk. 'You aren't obliged to come,' Mrs. Jameson reminded him.

'I should not know what to do if I went back,' was the grumpy answer. 'No, I will come on now, but I wish there were some other fellows going besides me. They'll be playing girls' games all the time.'

'You can hardly expect them to alter their party especially for you,' his mother reminded him. 'Mrs. Fossett only asked you this morning because she thought you would be dull without Jack, and I dare say Mabel is thinking what a nuisance an odd boy will be at her birthday party; so if you mean to go on, you had better make up your mind to be pleasant.'

Ronald did not much like this idea of being a nuisance, and he made up his mind that at all costs he would not be thought one. It was really as much shyness as anything else that was making him feel cross about the party. He knew very little about girls, having no sister of his own, but he had an idea that the fellows at school would look down on him for playing girls' games.

However, here they were at the gate, and tea was spread under the trees in the garden. Ronald was soon feeling very glad he had come, especially when he found himself feasting off a plate of strawberries and cream and chatting away to a little red-haired girl, called Monica, who seemed to know a good deal about butterflies, Ronald's favourite hobby.

After tea they played hide-and-seek, and Ronald found that he was enjoying himself quite as much as if he was not the only boy of the party, and he wondered what should have made him think girls were stupid. Certainly these were jolly enough.

'I'm so hot!' cried Mabel Fossett, throwing herself down on a mound of hay in the orchard, and all the others, with one accord, joined her. Suddenly a shining object caught Ronald's eye, and, picking it up from the ground, he dropped it carelessly into Monica's lap, exclaiming, 'A present for you!'

It was a large dead slow-worm, killed probably by the gardener, but Monica jumped up with a shriek, and flung the thing from her, at the same time turning deadly white.

'It's quite dead,' Ronald assured her, holding up the cause of the disturbance; but the fright was too much for Monica, and she burst into tears.

'You shouldn't have done it. It is very silly to frighten people,' said Mabel Fossett, indignantly, as she saw the scornful look on Ronald's face; and she led Monica, still sobbing, into the house.

'I am very sorry,' said Ronald to the rest of the party, 'but I never thought she would be frightened by a dead snake.' But to himself he thought, as he walked home, 'She was a little muff, after all; and I won't go to any more girls' parties, if this is the way they behave.' For the thought that he had been a nuisance, after all, rankled in his mind.

The next day was a stormy one. Ronald went for a walk along the top of the cliffs. There were a few people about, chiefly nurses and children; but presently Ronald saw in the distance two dogs fighting near the edge of the cliff. He started to run towards them; but long before he reached them a man had come up, and seizing one dog, a big collie, by the collar, he gave the little one such a violent kick that it fell yelping over the edge of the cliff. Then Ronald heard a scream, and Monica, with her red hair streaming in the wind, rushed up to the spot, and also disappeared over the edge, in spite of a feeble effort on the man's part to stop her.

When Ronald arrived panting on the scene, a little group of frightened people were staring at Monica, as she groped her way down the sloping face of the cliff towards her dog, which had fallen on to a ledge more than half-way down, and was whining piteously. Ronald stared aghast, and heard the people exclaiming round him, as if he were in a dream. It was the first time he had seen any one in such danger, but presently he came to his senses.

'It's your fault! Why don't you do something?' he inquired, angrily, of the collie's master, a rough, stupid-looking fellow.

'It's no good for me to go down,' the man snarled. 'See how the cliff breaks away under her.'

What the man said was quite true. Ronald did see, and grew cold as he watched Monica; for every now and then her footing gave way, and she would slide till some projection stopped her progress.

'Stay where you are,' shouted Ronald, 'till I get a rope!'

But even as he spoke Monica slid again down to the narrow ledge for which she had been making, and the dog's whines turned to barks of joy.

'Stay where you are!' shouted Ronald again, afraid that she would at once attempt the return journey. But Monica was exhausted, as they could see by the white face she lifted.

'A rope, yes, the very thing!' one of the nurse-maids exclaimed, while the collie's master, the only man in the group, followed Ronald, who had caught sight of a coastguard in the distance, and had flown to obtain his assistance.

The delay was terrible, for the coastguard had to fetch a rope from some little distance. It seemed an age to Ronald before he arrived with two

other men, and at once squashed Ronald's idea of going down himself, with the rope tied round him.

'You wouldn't be strong enough,' the coastguard declared. 'Why, the young lady has fainted, by the look of her, and she will be a dead weight.'

Indeed, it was no easy job for the coastguard himself, but he reached the top at last with Monica, white and unconscious, in his arms, while the dog's howls from down below still filled the air.

'Let me go down for him,' Ronald begged, and he was so persistent that at last the coastguard motioned to the two men to tie the rope round him.

'He can't come to any harm if you tie it properly,' he said, and then he turned his attention to Monica, trying to revive her.

Ronald did not take long in rescuing the dog, and by the time his head appeared over the edge of the cliff again Monica had come round, and the sight of her beloved dog completed the cure.

'Oh, Ginger!' she exclaimed, bursting into tears, 'I thought you would have been killed.'

Ginger, however, showed himself to be still brimming over with life, and Ronald's mind was filled with perplexity that a girl who showed herself to be as plucky as Monica had done should be so ready to dissolve into tears about nothing.

'Girls are queer,' he told himself.

But Monica, still very white, now proceeded to wipe her tears and her face and hands, which had got terribly scratched.

'You'd better drive home, Missy,' said the coastguard. 'And, if you'll take my advice, you won't go running down after your dog next time he tumbles over the cliff. You'd have been saved all those scratches if you'd only waited for me and my rope.'

'I never thought,' sighed Monica. 'It was very stupid of me, but I was so miserable about poor Ginger. Thank you so much for pulling me up, and thank you, too,' she added to Ronald, and held out her hand to each in turn.

'Well,' said the coastguard, 'whether you thought or not, you're a brave young lady to have tackled that cliff without a rope, and I'm thankful you came up alive.'

The little group dispersed when Monica had declared herself able to walk home with a little help, which Ronald was only too ready to offer.

'It's not far,' she explained; 'the second house we come to.'

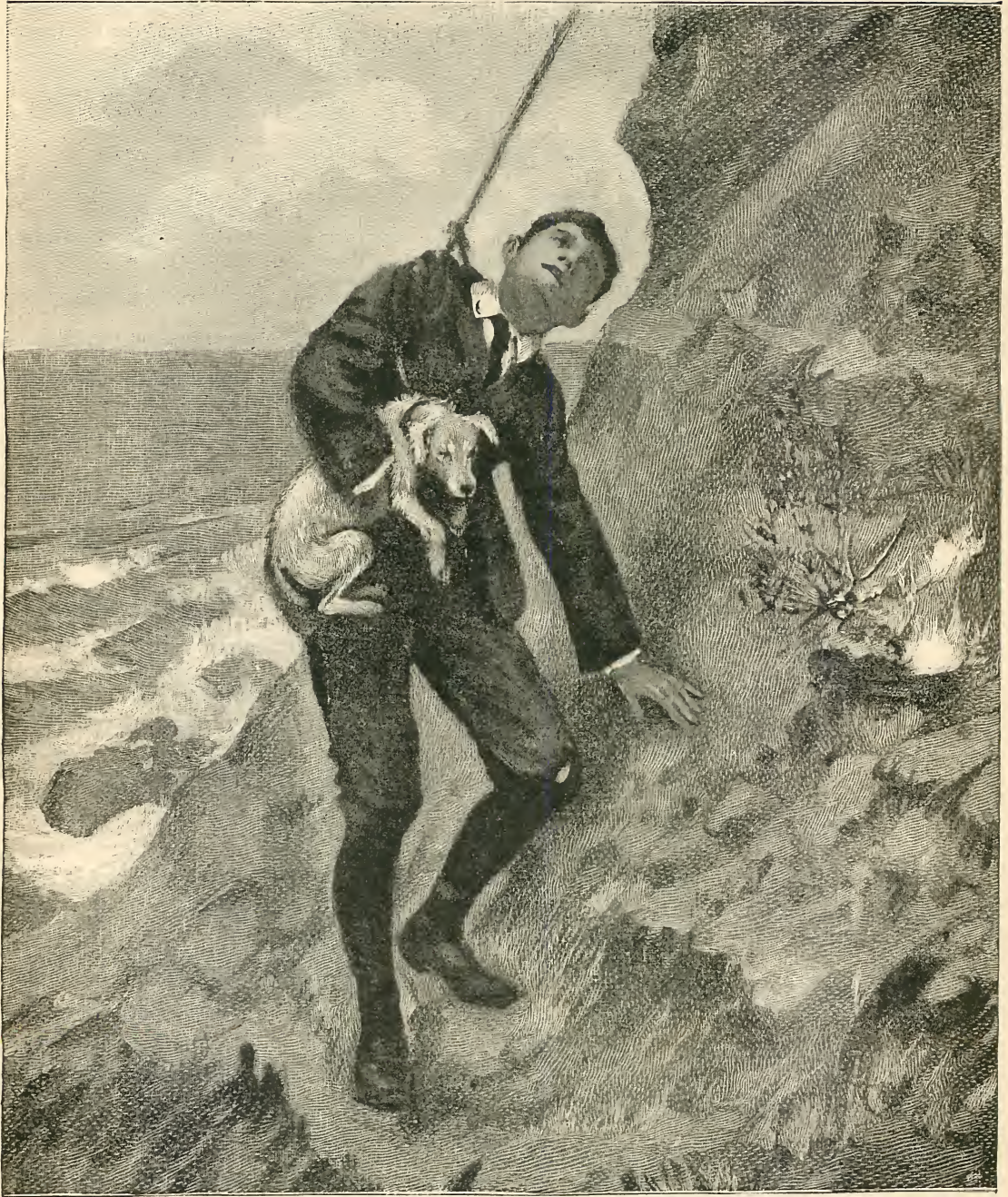
Ronald was silent. He did not quite know how to say what he wanted, but at last he blurted out, 'You are a plucky girl. How could you do it?'

'You don't really think that after yesterday,' said Monica, flushing.

'Indeed, I do,' Ronald declared, stoutly. 'And I can't tell you how small I feel. I should never have gone down for a mere dog like that.'

'But Ginger isn't a mere dog,' Monica explained. 'He's Ginger. You'd have done just the same if you loved him as I do.'

And that was how Ronald came to change his mind about girls, for he is now proud to own Monica as a friend, and has more than once told his school-fellows the story of her pluck.



"Ronald did not take long in rescuing the dog."



“He would delight in seeing the birds go free.”

THE PAINTER AND THE DUKE.

AMONG the mercenary soldiers who learnt the art of war in company with Braccio, the lord of Perugia, was a certain Jacopo, nicknamed Sforza or 'The Strong.' He had spent his youth as a field labourer, and when the idea was suggested to him that the paid warfare of those days would be a more profitable calling, he flung his axe at the trunk of a tree, exclaiming, 'If it stays, I will take it as a sign that I shall make my fortune.'

The axe did stay, and Jacopo, changing it for a sword, became the ancestor of the Dukes of Milan. His son, Francesco, made himself lord of the city, and ruled wisely and well; but the fortunes of the family changed in the next generation. Galeazzo Maria, the elder son of Francesco, was murdered by three of his subjects in revenge for his tyranny and horrible crimes, and Ludovico, the younger brother, seized the throne, calling himself regent for his nephew, the murdered duke's son. He was a strange man, this Ludovico, called Il Moro, one of those odd mixtures of wisdom and wickedness, cruelty and cultivated taste, who appeared in Italy at that time. He enriched his native city with treasures of art and triumphs of engineering, but never won the love of his subjects; he founded schools, and was the generous patron of artists and men of letters, while he destroyed without scruple those who stood in his way, and first imprisoned and afterwards poisoned the young nephew whose dukedom he had taken. His nickname, often supposed to mean 'the Moor,' is more likely 'the Mulberry,' the same word in Italian, as he was fond of boasting that he, like the wise tree which puts forth no leaves until the frosty nights are over, knew the right moment to act, and had patience to wait for it.

There was at least one great man, the greatest genius of his time, who had reason to love the Duke of Milan as a kind and liberal friend. About the year 1482, there came to the city a young Florentine recommended to the duke by a kindred spirit, a ruler as unscrupulous and as cultivated as Il Moro himself, the famous Lorenzo di Medici, then all-powerful in Florence. The young stranger, we are told, won the heart of the music-loving duke by his skilful performance upon an instrument of his own invention, 'a new and strange thing, made mostly of silver, and in the shape of a horse's head.' But this was only one of the many talents of the wonderful Leonardo da Vinci, who was, besides, so fair to look upon that 'the radiance of his countenance charmed the saddest heart,' even before his marvellous powers were known. In a letter written about this time to Il Moro, offering his services in any work the duke might require of him, Leonardo gives an extraordinary list of his own accomplishments. He was prepared to construct public and private buildings, to conduct water from one place to another, to execute sculpture in marble, bronze, or terra-cotta, and, in painting, to 'do as much as any other man.' One would say that these attainments were enough, without music and mathematics, a considerable knowledge of physics, and the power of expressing 'lofty thoughts in noble and eloquent language' which we find in

his writings. Only one thing was lacking to him, and that was the steady perseverance necessary to carry out his ideas. He loved so many pursuits and attempted so much, he aimed so high, and therefore never satisfied himself, and so, in one gallery after another, we find sketches and studies, beautiful specimens of unfinished work, but rarely anything completed.

At the ducal court, Leonardo certainly turned his hand to everything that his patron required of him. He would leave his painting to make plans for fortifications, turn from his sculpture to design costumes for a grand *fête* at the palace, or to consider a contrivance for heating the duchess's baths. No wonder that his work went on slowly and that people had sometimes to wait long for their commissions. Ludovico was anxious to set up in Milan a colossal statue in bronze of his father on horseback, perhaps in imitation of the magnificent figure of another great Condottiere, executed for Venice by Leonardo's master, Verrochio.

This was work after the heart of the Florentine artist, who began to study the anatomy of the horse with loving and accurate observation, for he loved all dumb animals, and seemed to have a happy understanding with them, and the power of taming wild creatures and overcoming their natural fear of man. There is a pretty story told of how he would buy up all the birds for sale in the shops, and, opening their cages, delight in seeing them go free. Nor was he above astonishing his friends with a tame lizard which he had fitted with extra scales and a sham beard. But though he made endless studies and at least two models for the great statue, it was never cast in bronze, and no stern and magnificent figure of Francesco Sforza rides in the city of Milan, as Colleoni, the Condottiere, rides in Venice.

But evil days came upon Milan. The wisdom of the 'Mulberry' must have sorely failed him when, to strengthen the position which he had won by a crime, he invited the French king into Italy, tempting him by the hope of conquering the kingdom of Naples. The French came and went, and came again, bringing upon Italy all the horrors of invasion by a nation far better skilled in arms. The next king, Louis XII., laid claim to the Duchy of Milan, and Ludovico lost the throne which he had kept so foully, and died, a broken-hearted captive, in a French prison. His beautiful city was over-run by an invading army, and the model of the great statue which was to have done honour to the house of Sforza was broken to pieces by the French soldiers.

It is a sad end to what should have been a brilliant career, and it is pleasant to turn from it to the last days of Leonardo, growing old amid universal love and reverence, working and teaching to the end of a long life, making his will with kindly thought for all his friends, even to the 'gown and mantle of good black cloth trimmed with fur,' for the maid-servant who had served him well.

The story of Milan is a sad one, full of bloodshed and treachery, and 'vaulting ambition that o'erleaps itself.' We are grateful to the Florentine whose life makes a happier page in the history of the city, the man who won what not every genius attains, not only world-wide fame but universal love.

AT THE TOP OF THE TREE.

IT is related of Rennie, the constructor of the Waterloo and Southwark Bridges across the Thames, and of many other great works, that, having on one occasion performed some work for the Government, he sent in his account to the Ordnance Department. The General who had charge of that department professed to be greatly surprised at the amount of the engineer's charges.

'Sir,' he said, 'this will never do. You have charged seven guineas a days for your services. That is as much as the pay of a field-marshal!'

'In my profession,' the engineer replied, 'I am a field-marshal.'

ANIMAL MAKESHIFTS.

True Anecdotes.

I.—PARTNERSHIPS.

IT is as partners, rather than as friends, that certain animals combine to carry out at times some plan which needs two or more heads instead of one. The beautiful friendships which they are capable of forming, both with their masters and between themselves, have nothing to do with the matter. The sort of agreement in question has something human in its worldly wisdom, and is generally for the good of both sides. In the case of the noble dog, however, with whom the worship of his master goes far before any thought of self or of his equals, the notion of doing a benefit for the being whom he adores is very attractive. A very clever makeshift partnership for this end existed between two sporting dogs, the property of a French Marquess. One was a pointer, the other a spaniel, and the two had no special liking for each other's company in private life. Their master lived near a wood, which was filled with hares and rabbits, and while sitting at the window one morning, he watched the two dogs come from the yard in which they ran loose, make signs to each other, and, after glancing at the house to see whether any objection would be raised, set briskly off together for the cover. The Marquess had the curiosity to follow, and he saw the pointer, who took the lead in the expedition, send out the spaniel to beat the bushes, while he went to a drain or passage along which rabbits often ran. Here he 'pointed,' and stood motionless, while the spaniel's voice, afar off, was heard in full cry as he was driving a hare towards the well-known passage. As soon as the ill-starred hare entered the drain, the pointer seized on it, and, with an air of triumph, laid it at his master's feet.

Mutual aid societies are the rule among gregarious animals; every member of a flock or herd feels the duty of preferring the general safety to his own, and a spirit of the same sort springs up among creatures sharing the same pasture for any length of time, though they are of different kinds. A donkey, attacked by a fierce boar, and driven from corner to corner of a large field, tried in vain to defend himself. This was seen by a gallant little pony, his fellow in the pasture, who, though considering the ass beneath his notice on ordinary occasions, at once ran to his rescue when he appeared in the light of a

comrade in distress, and with teeth and heels sent the boar limping off.

Very extraordinary do some partnerships appear till we find an explanation for them. Herodotus tells of a little bird that flew fearlessly between the jaws of crocodiles, and this strange sight is to be seen to-day on the banks of the Nile, where the monsters lie open-mouthed in the sun. The venturesome little bird in question is the black-backed plover, and his visits are not for the sake of the crocodile, but for that of a meal on the small flies and also leeches which infest the crocodile's teeth, tongue, and throat. The crocodile is far too sensible to interfere with the bird, which he has learnt by experience to be his benefactor.

'One for you and two for myself' is the motto of many a league between living beings besides man. It is so when the jackal, commonly called 'the lion's provider,' haunts the footsteps of the king of beasts to share the royal banquet. The feast is of the monarch's providing, nevertheless, and the latter, foreseeing that his king will be on the warpath, bestirs himself to pick up the crumbs that fall from his table. It is possible that the pilot-fish follows the shark as it would linger round a ship, for the sake of remnants of food, for it is hardly likely that this species of horse-mackerel takes the pains to guide and turn and warn the shark of danger, as sailors have fondly supposed.

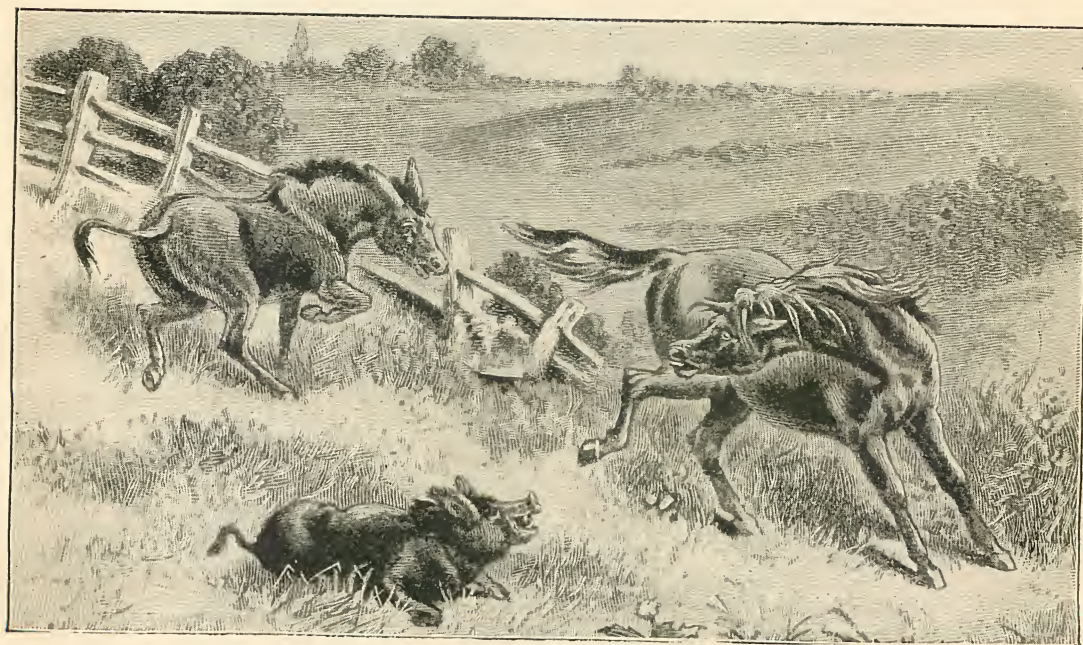
In America the little prairie-dogs share their tunnels with the burrowing owls, most likely because the same light, dry kind of soil suits them both. It is a convenience, at any rate, for the queer little owls to have a lodging gratis. As the prairie-dogs are vegetarian, and the food of the owls consists of beetles and other insects, with small animals, such as young rats, mice, snakes, and other intruders, it may also suit the quadrupeds to welcome the birds as we welcome cats into our houses, on the strict understanding that the lives of baby prairie-dogs are to be held sacred. Some tacit deed of partnership must have been drawn up, and peaceful conditions arranged, otherwise either the owls or their hosts would have migrated, leaving the conquering race in possession.

With the very practical purpose of providing a supper which was to the taste of both, a certain tame jackdaw used to invite the cat of the establishment to accompany him on poaching excursions. The oddly-matched couple would go in and out by a hole at the very bottom of a quickset hedge into the open fields, and there hunt for game. They were wonderfully successful in their raids, as the 'bag' they brought home always proved. One day the owner of both, hearing a great fuss and flutter of wings at the hedge, went to see what was amiss. He found the cat and jackdaw quite frantic because they could not drag a large hare which they had killed through the hole. The cat was tugging with might and main on one side of the hedge, while the bird pushed as hard as he could on the other. This pair were barely on speaking terms when sport was not in the wind, and did not risk the respect which they felt for each other on the hunting-field by that familiarity which breeds contempt at home.

EDITH CARRINGTON.



“He ‘pointed,’ and stood motionless.”



“The pony at once ran to his rescue.”



“‘That is the last,’ his father said.”

THE TELL-TALE POST.

A FARMER had much trouble with his young son, George, who was lazy, careless, and thoughtless. He tried many ways of making the

lad see his folly and realise how much trouble it gave to every one. At last he hit upon an expedient which he thought might be successful. Calling the lad to him, he pointed to a post near the stables, and told him that it was his intention to drive a nail

into it whenever George failed in his duties. And, in order to encourage the lad to do better, he promised to withdraw a nail whenever George did anything properly and well.

George took little notice of what his father had said, but went on in his usual way, doing his work carelessly and neglectfully, as he had always done. He did not see how a few nails in a post could make much difference to him, or any one else for that matter. But when at last the post was nearly covered with nails, he began to think that he must have caused his father a great deal of trouble and annoyance by all the little misdeeds which he read, as it were, from the nails on the post. He felt rather ashamed of himself, and, as he knew that he could not undo the record made against him, he began seriously to watch his own behaviour, and try to do what his father wished.

One by one, as George reformed his ways, the nails were withdrawn, and at last there came a day when the last was drawn out.

'There, George,' his father said as he pulled it out with the claw of his hammer, 'that is the last. Does it not give you pleasure to see it out?'

But George was sad, and his sadness was revealed in his face. 'No,' he said, 'the nails are gone, but the holes will always remain to remind me how bad and foolish I have been.'

THE LAMENT OF THE UNSOLD DOLL.

HIGH-HO! I'm very lonely here,
And can't suppress a sigh
To think that, though I'm far from dear,
There's no one comes to buy.
The ticket on my pretty shawl
Is marked in letters red:
'Look! one-and-six, this handsome doll!
Including dress and bed.'
Yet children through the window stare,
And eye me up and down,
While grown-ups buy (with lots to spare)
Some golliwog or clown.
Three wooden dolls and two of rag,
Five monkeys climbing string,
One polar bear that waved a flag,
One rabbit on a spring—
All, all have left me one by one,
Some other home to seek,
And I must say it's far from fun
To lie here week by week!
My hair is clustered locks of gold;
My cheeks a healthy red,
And yet, till I am some day sold,
I'm doomed to lie in bed.
The skies are blue! I see them through
The dusty window-pane,
And long to rise as others do,
Yet only long in vain.
'Upon my word,' the shopman said,
'It stands to common sense
That such a doll, with dress and bed,
Must sell for eighteen-pence!'

*I think so too. But week by week
In loneliness I lie,
And those who come a doll to seek,
Some other doll will buy.*

NAN'S REWARD.

NAN had looked forward to it ever since she could remember, even as far back as the days when she wore white socks and sun-bonnets. And now she was going to get her heart's desire. In a few days more the big ship would bring her mother safe to England.

When her aunt told her she cried a little, just because she was so happy. Not that Nan had ever been really unhappy. She had lived with a kind aunt who had two children about Nan's own age. But, though her aunt had been as kind to her as any one could be, Nan had always longed for her mother.

'You see I don't properly belong to Aunt Lucy,' she explained to Donald, her eldest cousin; 'it is to my own mother that I really belong.'

She put flowers in the room that was to be her mother's, and wrote 'Welcome' on a card to put over the mantelpiece.

'Of course, you will want to see your mother first,' Aunt Lucy said to Nan, 'so you may come with me in the carriage to-morrow to meet her.'

But when to-morrow came, Donald had toothache. 'There is only room for two in the carriage, and I must take Donald to the dentist. Do you mind very much not going to the station, Nan dear?' Aunt Lucy said.

Nan was a brave little girl. 'No,' she said with rather a choke. But when her aunt was gone she turned to the window and a tear splashed on the sill. Donald would see her own mother before she would, she thought. 'How long do you think they will be?' Nan asked Nurse.

'Two hours,' she answered.

'Two hours!' Now, two hours to Nan sounded a very long time. Suddenly she heard a fly drive up to the door. 'Some one to see Uncle John, most likely,' Nan said to herself. But the 'some one to see Uncle John' came up the nursery stairs and even opened the nursery door. Nan turned. A lady like Aunt Lucy, only with brown hair instead of grey, stood in the doorway.

'Mother!' Nan cried and ran forward.

'Yes,' the lady answered, 'I caught an earlier train, because—well, because I was so impatient to see my little girl!'

And so, after all, Nan saw her mother before any one else did.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 19.)

GET our luggage taken upstairs to our rooms,' said Teddy to the hall-porter of the Claring Cross Hotel. 'This is Mr. Marley's luggage and this is mine, and don't let them get mixed. What's the time—seven? Bless me, we shall not have much time to spare if we want to dine before going to the

Hippodrome. Is "The Sinking of the *Octopus*" still on at the Hippodrome, do you know?"

"I believe it is, sir," said the hall-porter, turning to a number of playbills pinned against the wall of his lodge. "Let's see. No, sir, "The Sinking of the *Octopus*" is off; but the great Spanish Acrobat is on at eight-thirty."

"Bother!" said Teddy. "Never mind, we'll go to the Hippodrome all the same. Come along, Marley; I want to order dinner."

He ordered dinner, and they then went upstairs to wash and dress. Whilst Teddy, with his coat off, was plunging his head in a basin of cold water, Dick Marley came into his room.

"Teddy!" he shouted.

"What's the matter?" demanded Teddy, puffing and blowing through soap-suds and water.

"I've opened that trunk!"

"What's in it?"

"You come and see," said Marley; "you just come and see."

Teddy followed his companion across the corridor and entered a bedroom; near the bed stood the trunk open and its contents partly on the floor: about two dozen pots of home-made strawberry jam, several large cakes, some crocks of marmalade, a pie, and a Cumberland ham.

"It's Hannah," said Marley.

"Good gracious!" cried Teddy; "what on earth are we to do with all that stuff? We daren't bring it aboard ship or we'd be the laughing-stock of everybody."

"It's what they send with fellows that are going to school," said Dick, in a disgusted voice. "I know now what she meant last night when she said I wouldn't be starved to death on cannibal islands if *she* could help it."

Teddy gave a shriek of laughter, and danced round the provisions.

"For goodness' sake, dry up," said his companion, "and think what's to be done; we can't cart all this stuff on board ship. Well, what are we to do with it?"

"Why, eat it, of course," replied Teddy, pausing in his war-dance to contemplate the articles on the floor.

"Well, if you can tell me how we are to devour two dozen pots of jam, and a pie, and a ham, and all the rest of this stuff before to-morrow morning," said Marley, "I'll begin to try. Do be serious and think."

"I'm thinking as hard as I can—see here, pop the lot back in the box, and I'll think the matter out whilst we're at dinner—come along, let's finish dressing and go down."

They dined in the big *salle à manger*, Teddy astonishing the waiters by breaking out into snorts and chuckles every now and then. The idea of Hannah and her fears about cannibal islands, and of all that lot of provisions upstairs, was too much for his gravity.

"Well," said Marley, as they were finishing dinner, "have you thought yet what we're to do with it?"

"I haven't, but I tell you what, we will go to the Hippodrome, and I will try and think of it there."

There was as usual a good bill of fare at the

Hippodrome. Beside Teddy, on his left, sat two dark, foreign-looking men, who kept up a conversation with each other in Spanish, between the acts. There seemed to be a good many Spaniards in the house, drawn no doubt by the attraction of the great Spanish acrobat.

When the affair was over, in the crush outside, Marley lost his companion.

"Well," said he to himself, "I'll just wait about on the steps till the people thin off, and I will be sure to find him—both Teddy, why couldn't he have stuck closer to me?"

Cab after cab drove away, and the crowd got thinner and thinner. Dick got tired of waiting, and was just on the point of starting off for the hotel, leaving Teddy to follow at his own sweet will, when the latter came up the steps panting as if he had been running.

"Where have you been?" demanded Marley.

"Come along," said Teddy, "and I will tell you the queerest thing you ever heard. Come along this way, it's quiet, and we can walk to the hotel—I know the way. Did you see those two foreign chaps sitting beside me?"

"No, I didn't notice them particularly."

"Well, they were talking Spanish. I know a bit of Spanish. I wasn't listening to them especially, till they dropped the name of our ship, the *Kingfisher*, and then I pricked up my ears, I can tell you, and pricked them up smart, but I was too late, for they were getting to the end of their confabulation, but I heard one fellow say to the other, "There must be no throats cut if possible." And the other replied, "Possible would be a very fine word were it not for the word 'Impossible.' What will be, will be, and you cannot make omelettes without breaking eggs." Then they began talking of other things, and in the crush just now I nipped out after them. They got into a cab down the street, and I heard them telling the driver to go to Trafalgar Square. Now, it's a funny thing their mentioning the *Kingfisher*."

"It might be some other ship than ours."

"There's no other ship of the same name, I'm pretty sure."

"Would you recognise them again?"

"Rather," said O'Brien. "That's why I ran after them, and you bet if I see either of them near the ship to-morrow, I'll have him arrested. Come along. We'll have to be up early in the morning."

"What's *Kingfisher* in Spanish?" asked Dick as they trudged along.

"I don't know," replied Teddy.

"Then how did you understand that they were talking about the *Kingfisher*?"

"Because they said the name of the ship in English, muffin-head! Don't you know a ship's name always sticks to her, and is never translated? Well, you will know more than you know now before you've been a month at sea."

"Have you thought of what we're to do with those jam-pots and hams and things?" asked Dick as he went yawning to his room.

"Yes," said Teddy. "We will stow them under your bed or somewhere in the morning. You leave it to me."

(Continued on page 34.)



“‘What on earth are we to do with all that stuff?’”



"Nodder and his old boat found themselves suspended."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 31.)

CHAPTER V.—THE SUSPENSION OF MR. NODDER.

NEXT morning, whilst they breakfasted, O'Brien was seized with fits of suppressed laughter at the thought of the scene that would occur when the provision store was discovered by some housemaid under Marley's bed. Then they went up, packed, disposed of the edibles as O'Brien had suggested, had their luggage taken down, and drove off.

The *Kingfisher* was lying off the great telegraph works of Roberts and Roberts, so they had to take train to Canning Town, one of the most dreary railway journeys in the world. At Canning Town Station Teddy got a porter and a truck, and they went to the waterside, the porter wheeling the baggage after them.

'There she lies,' said O'Brien, pointing to a powerful three-thousand-ton steamer anchored in mid-stream, painted white, and looking whiter than she was by contrast with the muddy water that lapped her sides. 'There she lies, and she's had a new coat of paint. Hallo, you there!' to a longshoreman in a boat, 'what will you take us off for?'

'Off to where?' answered the longshoreman, resting on his oars.

'Where? Why, to the *Kingfisher*; where else d'you think we want to go—to Germany?'

'You and all that there luggage?' asked the longshoreman, disregarding the last question.

'Yes, us and all our luggage; look sharp, or we will take an omnibus, which would float as easy as that old tub of yours.'

'Seven shillings,' said the longshoreman, a notorious character named Tom Nodder, who made a large income by squeezing money out of seafaring folk anxious to reach their ships.

'Seven *what*?' cried O'Brien.

'Shillings.'

'I'll give you two.'

The longshoreman said nothing, but simply put his boat up to the steps.

The porter put the luggage in, O'Brien paid him and jumped in after Marley, who was seated in the stern sheets, and Mr. Nodder with a couple of strokes sent the boat out into the current; then he rested on his sculls, took out a short black pipe, lit it, and drew a whiff.

'What are you stopping for?' demanded Teddy.

'My fare,' replied Mr. Nodder, who was a man of few words: 'Seven shillings.'

'Why,' cried Teddy, 'what are you talking about? You said you'd take us for two.'

'I said nothing,' replied the unmoved Mr. Nodder. 'You got into my boat, you an' your mate an' your luggage, and out of it you won't get under seven shillings.'

'Then take us back to the steps.'

'Back or forrard, the fare's seven shillings.'

'Then we'll stay here all day,' replied Teddy.

'I'm agreeable,' replied the other, smoking unconcernedly and letting the boat drift.

They were drifting past the *Kingfisher*, over whose after-rail two men were looking. One, an enormous man in a blue woollen guernsey and with a face that looked as if it were hewn from granite; the other a little man with a sharp, weasel-like expression.

'Kipper! Ahoy!' cried Teddy.

'Ahoy!' replied the big man. 'Pay him his seven shillings, Mr. O'Brien, and come aboard. I know the rascal; you shouldn't have had anything to do with him; but now he's got you, you can't get out of it.'

'Right,' said Teddy, into whose mind a joyous idea had leapt. 'Here's your money,' said he, handing the coins, which Mr. Nodder pocketed; 'now row us up—no, not to the gangway, to the starboard quarter-boat falls.'

The starboard quarter-boat was away and the davits were empty, and Mr. Nodder, unconscious of his fate, rowed under them.

'Quick, Kipper! a rope,' cried Teddy, and a second later down came a rope slap on the thwarts.

'Now, Kipper! down the rope you come and I'll show you some fun. Skinner!—to the little man—'is there any steam on the winch?'

'Ay, ay!' answered the donkey-man, who took Teddy's meaning at once, whilst 'the Kipper,' one of the cable hands, so called because his name was Christopher, came quickly down the rope, whilst Skinner lowered the falls.

'Here, you!' cried the outraged Mr. Nodder, 'what are you doing in my boat?'

Before he could say a word more, the falls were fixed fore and aft. 'All right above?' shouted Teddy.

'Ay, ay!' replied Skinner, who had coupled the winch to the falls.

'Then hoist away.'

The winch rattled, the falls tightened, and the old longshore boat left the water and began to rise into the air. Marley felt as if he were going up in a balloon.

'Hi, what are you doing?' shouted Nodder. 'She'll break her back with all this here luggage in her. Hi! you there at the winch, I'll have the law of you. I'll give you beans if you bring me aboard—where's the river police, and what are they doin' of to let a honest longshoreman be shanghaied by a tea-kettle of a cable tramp?'

'Hoist away!' cried Teddy, and slowly and gracefully the old boat, groaning as if she were astonished, rose till the falls were chock-a-block with the davits.

'Now we're too high,' shouted Teddy; 'lower away and get us level with the bulwarks: I want to get our luggage out. That's right! out with the things; now hoist her again tight up to the blocks and let her stick there an hour and air herself.'

Nodder and his old boat found themselves suspended in air like some strange and unsavoury form of fruit, and the thoughts of Mr. Nodder, as he leant over the side of his craft and addressed the grinning cable hands below him on the deck, could hardly be expressed.

Now, Captain Sprott, the captain of the *Kingfisher*, a stout little man with a very red face, huge whiskers, and a furious temper, was at this very

moment putting off from the telegraph-works' boat-slip, and, as he was rowed across, he literally could not believe his eyes at the sight of a filthy old long-shore boat hoisted at the davits of his bright, clean ship.

Teddy and the cable hands had no time to think before the old man—a sea-captain is always called 'the old man,' no matter what his age may be—was amongst them.

If Captain Sprott had stopped to think, he would have asked questions of Teddy or one of the hands; but he did not stop to think, the sight of the old boat and its occupant enraged him so.

'Here, you there!' cried Captain Sprott, 'you red-faced scoundrel! what are you doing aboard here? What d'you mean by daring to hang at my davits, eh? Where did you come from, you and your tub?'

'Where did who come from?' roared the other. 'Who are you calling red-faced scoundrel?—red-faced yourself. You come ashore and I'll give you what for—you an' your cable-tank—yah! Where's the river police? I'll teach yer whot's whot—lower me out of this or I'll have you before the magistrate.'

'Lower away, lower away!' cried the captain to the donkey-man, and Mr. Nodder and his boat disappeared slowly from view. 'Lower away and get rid of the fellow. Who's responsible for this?—what's the meaning of it?—who swung him there?'

(Continued on page 43.)

FAITHFUL FAIRY.

FAIRY was an ugly British bull-terrier, as much unlike a fairy as anything you could possibly imagine. But underneath all his ugliness he had the truest and most faithful of hearts, and that heart belonged entirely to Kathleen, his little mistress of seven years old, who was an American child. They had been playfellows ever since she was a tiny baby, and he would do almost anything she told him, though towards most people, and especially to strangers, he was most ferocious.

'He's the best watch-dog we have ever had,' Kathleen's father said, and Fairy seemed to understand what he said perfectly, and tried to look more ferocious than ever when a stranger approached him.

Naturally, when he found that Kathleen was bestowing all her attentions on some one else, his feelings were deeply hurt. His rival was Kathleen's baby-brother, and Fairy's heart was low with jealousy when he saw the kisses and caresses, which used to be all his, showered upon the unconscious baby in its grand pink cradle.

'He's nothing but clothes! Whoof!' growled Fairy to himself, as he moped in a corner and watched Kathleen, who was going out with her mother, saying good-bye to the baby. She certainly did treat Fairy very badly, for she turned without a look at him and drove off in the carriage.

'There's Fairy following us,' said her mother when they had gone a little distance. 'I think, dear, you

must send him back, for there are no men about the house to-day, and I shall feel happier about Baby if Fairy is on guard.'

So the carriage was stopped, and when Fairy came up, Kathleen said to him: 'Good old Fairy! go back and guard Baby till we come home again. Home!'

'Whoof!' barked Fairy, which was his way of expressing deep disgust; but he trotted obediently home again.

The house was in a lonely part of the country, and American country is much more wild than English, so a good watch-dog was very necessary to Kathleen's father, for he was a rich man, and his house was full of valuable things. Fairy seemed to know all this, and he also knew that the baby was considered quite the most valuable possession in the family; so when he saw that the nurse was neglecting her duties, and gossiping in the kitchen, he quietly crept upstairs as if to take her place.

'Not that I care what happens to the precious baby,' he grumbled to himself, 'but Kathleen would never forgive me if any harm came of it.' And Fairy's jealous feelings rose again as he mounted the stairs.

He reached the threshold of the beautiful nursery, and there a strange sight met his eyes. A wild-looking dark woman was in the act of lifting the sleeping baby out of the pink cradle. She did not see Fairy. The dog's hair bristled with anger, but for a moment he did not growl. He stood perfectly silent, while the woman stole across the room to an opposite door, which led to a dark staircase.

If ever dog was tempted, poor Fairy was at that moment. It seemed to him that if the woman stole the baby, Kathleen's affection would be his once more. It would be a good riddance to him. No other cause could have kept such a faithful watch-dog silent; but, fortunately, his better nature asserted itself in time, and his fighting British instincts awoke.

With ferocious growls, he sprang across the room till he was between the woman and the door. She screamed in terror. Fairy, however, contented himself with growling, and gradually drove the woman back towards the cradle. But by this time the other servants had heard the woman's screams, and came rushing upstairs.

The nurse snatched the baby from the arms of the dark woman, who would have escaped, but Fairy again barred her way, and kept her a prisoner till help could be brought. She was finally locked up till Kathleen's father and mother returned.

The woman was then questioned, and it turned out that she had been compelled to steal the baby by her husband, who meant to keep it till a large sum of money was offered as a reward.

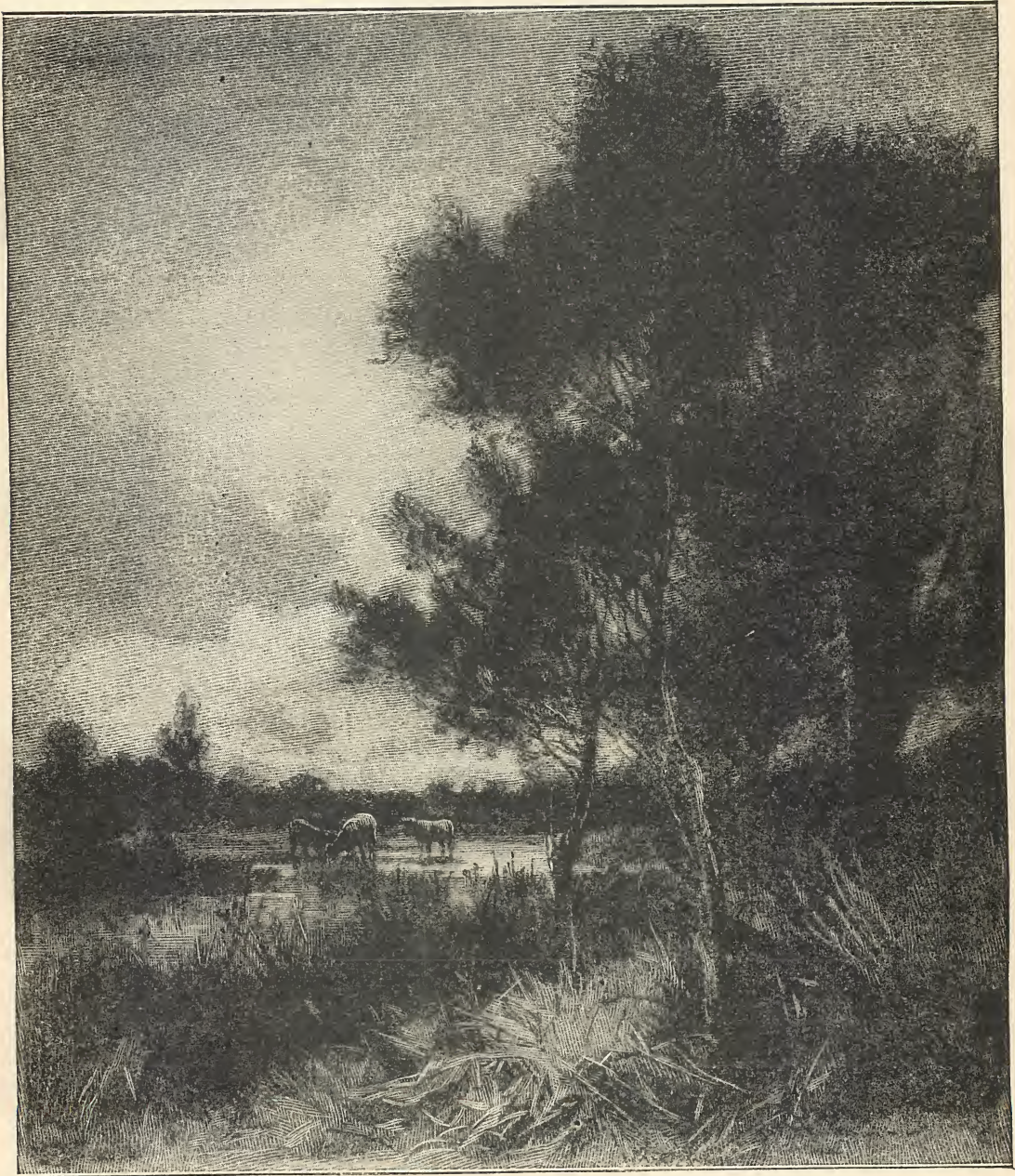
'We saw the men go off to the hay-field, and the dog went after the carriage; so we thought it would be pretty safe, though I had to hide a long time before the nurse went downstairs. We meant no harm to the little dear, I assure you, ma'am,' the poor woman said; and at last she was allowed to go free, with many promises of amendment.



"The dog stood perfectly silent."

Fairy ought to have been glad, for it was through her that he now occupied the position of a hero in Kathleen's eyes. Indeed, he never regretted that

day's work, and a year later he could not have told you which he loved best, Kathleen or her baby-brother.



EVENING.

THE golden sun has gone to rest,
And twilight shadows fall,
The toiling day has passed away,
And peace is over all.

The birds on weary wing have flown
To seek the sheltering nest,
And children, wearied with their play,
Are hushed in quiet rest.

The breezes wake amongst the trees,
And o'er the pastures steal;
The cattle in the meadow-lands
Their cooling influence feel.

The western glory softly pales,
Its colours fade and die,
Till but a streak of light remains
Far in the sunset sky.

Then brightly peep the silver stars,
To lend their tiny light,
And this is what they seem to say,
'Good-night to all, good-night.'

AN ESCAPE FROM SIBERIA.

A True Story.

A CERTAIN B—— was regarded by the Russian Government as the moving spirit of the Revolutionists, and was lately sentenced to fifteen years' imprisonment in Siberia. He had no sooner arrived at a famous prison on the Mongolian frontier, than his comrades began to lay plans for his escape.

An opportunity soon presented itself. A Siberian prison is not run on the same lines as an English prison, and as escape is considered almost impossible, there is much less supervision than in our prisons. The convicts do their own cooking, and in this case had frequently to go to a little building which served as provision-stores. Of course they were always under the eyes of warders and soldiers, but still, this little building seemed to offer possibilities, of which the convicts were not slow to avail themselves.

They determined to dig a tunnel in this place, big enough to allow a human body to pass; but it seemed an almost superhuman task to accomplish, for, of course, it could only be done by snatches, and the earth had to be carried away by handfuls at a time, whilst the hole itself must be concealed from the warders. We should say such a task was simply impossible; but by dint of immense patience and ingenuity, the tunnel was at last made.

But now came the difficulty of getting B—— from his cell to the storehouse and leaving him there for the night; it could only be under cover of darkness that the attempt to escape could be ventured. This was the plan they hit upon.

The convicts had frequently to move to the storehouse barrels and sacks of potatoes or flour, and so at a favourable opportunity B—— was smuggled into the storehouse in one of these barrels before the very eyes of an unsuspecting warder, and left there for the night, to effect his escape if possible.

The next thing to be done was the most difficult of all, namely, to conceal the absence of the fugitive from his cell, seeing that a little window in the door of the cell always allowed a warder to look in at any moment, day or night, and to see whether all was right inside.

Fortunately B—— was not kept in solitary confinement, but had other convicts confined with him

in his cell. One of these happened to be a sculptor, who got hold of a cheese and made out of it a bust resembling the head and face of B——; and this dummy bust was constantly spoken to by the convicts, in loud tones, whenever they heard any warder approaching.

The warder would as usual look through the little window, and seeing all were present and debating eagerly according to their custom, he passed on contentedly, and thus B——'s absence was not discovered for many hours, and by that time he was safely across the border, and the police failed to catch him in spite of most strenuous efforts.

AN OPTICAL ILLUSION.

VISITORS to Durham Cathedral are shown a round column in the transept with zig-zag grooves cut as ornamentations from top to bottom. Behind the column, a short distance apart, are two tall windows, and the light from these, falling on the column, has the curious effect of throwing it out of the upright. Looked at from one quarter the column appears to lean over to the left; but on the visitor shifting his position, an opposite result is obtained. It is only by standing directly in front of the column, with the light falling equally on both sides, that we are able to see how correctly the builders really worked. It is said that the deception was contrived so that those who saw the column might be reminded that it is necessary to see things from the proper point of view before we are justified in expressing an opinion. But it is much more likely that the column was designed without knowing what effect the ornamental grooves would have on the sight, and that the moral was invented afterwards by way of an excuse.

THE SCARLET GERANIUM.

GERANIUM! Geranium!
With cheeks of flaming red!
I like the perky way you have
Of holding up your head.

I wonder if you really are
As bumptious as you look,
Or whether, if you had the chance,
You'd choose a modest nook?

I think myself it pleases you
To look so bright and gay,
And that you would not like to hide
Your brilliant face away.

When winter comes, Geranium,
You'll *have* to hide your head,
For then the gardener keeps his plants
Inside the potting-shed.

And there you'll lie for weeks and weeks
All covered up in straw,
To dream about the summer days
Until they come once more.

PUZZLERS FOR WISE HEADS.

2.—HIDDEN MOUNTAINS.

1. The old bridge is now done with
2. It was never established on a good foundation.
3. You get thoroughly wet navigating its arches.
4. The clammy timbers are mouldy and rotten.

W. S.

3.—CHARADE.

My first is a number squared; my second is small
and pointed; my whole is something to play with.

[Answers on page 74.] C. J. B.

ANSWER TO PUZZLE ON PAGE 2.

1.—R Y E
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ANIMAL MAKESHIFTS.

*True Anecdotes.

II.—PLAYMATES AND PLAYTHINGS.

WE need not go very far to find out why animals play. Though learned men have searched for many deep reasons, boys and girls know. Young creatures play because they feel full of life, health, and joy. Just look at a puppy or a kitten at their romps! The young dog makes a play-mate of his master if he can, while for play-thing a stick, ball, or stone will do. He is the descendant of wild creatures, which (like the wolves of to-day) lived in troops, and so needs a comrade more than Puss does, whose ancestors led solitary lives. The little cat does not so much depend upon a playfellow. A feather, a leaf blown by the wind—still better, a cotton-reel or ball, anything that can seem to be alive—will suit her, and will do for a plaything. Not but what she, too, likes a playmate, if she can find one to her mind; and a cat, if never played with, may grow to be both stupid and cross.

Many wild animals have regular games. Young monkeys meet together, like schoolboys, for no other reason. Their elders look solemnly on, and should any youngster become rough or spiteful, will rush in and chastise the offender. It has been fancied that birds never play, nor do they often do so when imprisoned in cages, because they are not enjoying the liberty which their Maker intended them to have. When free, birds are very playful, chasing each other on the wing, having sham fights, mimicking one another, always merry, ever gay. If tamed without being robbed of freedom, birds are fond of practical jokes. An Irish gentleman possessed, as a favourite, one of a rare species of hawk, the buzzard (now almost extinct through the ruthless practice of shooting rare birds), which flew loose about his grounds. This bird exercised its wit by flying at the heads of strangers who went up to the house, and knocking their hats over their eyes from behind. So quick was he in getting out of the way that he left the astonished owner of the hat to look about in vain for the impudent person who had acted so disrespect-

fully, and to believe that his hat must have been tilted by magic, while the hawk sat, as if laughing to himself, in the nearest bush.

It is a pretty sight, indeed, to see lambs frisking in the fields. When at play they always seek the steepest parts of the pasture, and if there is a rock or a log lying about they will skip on to it, and butt at one another as if playing 'King of the Castle.'

Our humble friend the donkey is a great lover of fun, though, alas! he is often made old before his time by drudgery and blows, and feels no heart for it. A young ass belonging to a miller at R— makes everybody laugh by his antics and funny ways. He knows how to open the kitchen-door, walks in, and regales himself on any morsel that a donkey likes. He is particularly fond of his master's dogs, and has been seen to go to a kennel, and with his teeth unbuckle the collar of a retriever, and bite through the leashes of other dogs, and then go with them for a gambol in the cricket-ground near the house. This donkey was (and, let us hope, still is) often seen walking gravely up the High Street, with a mob of dogs behind him, on his way to the recreation-ground.

Another pleasant and absolutely true instance of the enjoyment felt by animals in companionship was given me by an old soldier who owned one of the creatures in question. He said: 'There was an officer in my regiment who had a dog and a cat, and I had a rat; and he used to tell the cat to pick up the rat, and then he used to tell the dog to pick up the cat; and off they used to go to the messroom, the dog carrying the cat and the cat carrying the rat.' I remarked: 'Didn't they hurt each other?' He replied: 'Oh, no! When they got to the messroom, the officer told the dog to put down the cat and the cat to put down the rat, and they used to have a play together. And after a while he would say, "Now, we must be off!" And the cat picked up the rat, and the dog picked up the cat, and home they went again.'

But the spirit of joy dwells in the dust as well as above and around. The little '*people not strong*' are as good at play as at work. Hubert watched ants on a fine day assemble on the surface of their nest and amuse themselves in pursuits which he could only describe as 'athletic sports or other games. They raised themselves on the hind legs and wrestled, always in the friendliest way; then they let go, ran after each other, and played hide-and-seek. When one was victorious it seized all the others in the ring, and tumbled them over like ninepins.' Another great observer, Forel, could not believe this till he himself had seen ants 'like boys playing.' It is remarkable that at their play animals never seem to quarrel or hurt each other wilfully. They know that they must not treat a thing of flesh and blood like a thing of leather or wood. And it would be well if our own little ones followed their example, for babies and very little children often give much pain to their pets without meaning it, because they have not yet learnt that an animal is not a mere toy, but is, in its lowly way, a *person*. Their elders will, of course, always keep in mind the difference, and realise that a play-thing is a very different matter from a play-mate.

EDITH CARRINGTON.



"The dog carrying the cat, and the cat carrying the rat."



"Love me, love my dog."

PICTURES AND THEIR PAINTERS.

From the Wallace Collection, London.

II.—SIR JOSHUA REYNOLDS.

WE can hardly imagine a greater contrast than between Frans Hals, the boon companion of the tavern, the painter of roystering soldiers and travelling players, and Sir Joshua Reynolds, the cultivated, scholarly gentleman, to whom all the noblest and the fairest in London society sat for their portraits.

Sir Joshua (whose portrait is given on page 45) was an artist from the boyish days when his father, the master of a Grammar School at Plympton, in Devon, wrote severely across a pen-and-ink sketch in his son's exercise-book, 'Drawn by Joshua in school out of pure idleness.' Still, the good schoolmaster had the wisdom to see that the boy's talent ought to be cultivated, and, at seventeen, Joshua was sent to London to study art under the painter Hudson. He returned after two years to his native town, where he distinguished himself by his portraits of the chief people in the neighbourhood. It was in Devon that he formed a friendship, destined to be very valuable to him, with the future Admiral Keppel, who, in the year 1749, took the young man for a cruise in the Mediterranean. Reynolds returned by way of Rome, Florence, and Venice, and made his first acquaintance with the works of the great Italian artists. He had the capacity for close, hard study and steady work, which does not always go with genius, and he made the very most of his time, learning to see and appreciate the nobility and sweetness of Raphael, the force and power of Michael Angelo, and the wonderful warmth and glow of colour in the Venetian paintings. He paid heavily, however, for his lessons in art, by a cold caught in the Vatican, which was followed by deafness, obliging him always to use an ear-trumpet.

When he resumed his work in London, his portraits speedily became the rage, and distinguished men and notable beauties flocked to his studio. Following the taste of the artificial age, he often painted his sitters in classical or allegorical costume, but they were none the less characteristic portraits, and the faces of many a well-known Court lady and winsome maiden have been preserved for us in the guise of 'Muses' and 'Graces.' He must have had, besides, bachelor as he was, a great love and understanding of children, or he could never have left us such beautiful and tender portraits as that of little Miss Bowles, in our illustration, hugging her much-enduring dog; the baby daughter of the Duchess of Devonshire, throwing up her fat hands as she romps with her beautiful mother; or the little round-limbed, reverent 'infant Samuel,' kneeling at his prayers.

Unfortunately Sir Joshua had a passion for trying experiments in the mixing of his colours, and the results, though brilliant at the time, were often not lasting, so that many of his best pictures were faded and cracked even in his own lifetime.

His sweet temper and courtly, graceful manner made him as popular as he was famous, and the

house in Leicester Square, where he lived with his kindly, fidgety sister, Miss Frances Reynolds, was the resort of the best and most cultivated men in London. Kind, quick-tempered Dr. Johnson; brilliant Garrick; witty, tender-hearted Goldsmith, and many another loved the courteous, gentle painter, who, when awkward topics were touched upon,

'Shifted his trumpet, and only took snuff.'

In 1768 the Royal Academy was founded, and Sir Joshua became the first President. His annual addresses are famous, both for their excellent teaching on art and for their fine, forcible English; in fact, one active critic suggested that Johnson must have written them.

'Sir,' replied the doctor, with his usual emphasis, 'Sir Joshua would as soon ask me to paint his pictures.'

In 1789 a terrible trial came upon the painter, the partial loss of his sight. His working days were over, though he remained President of the Academy, by special request, until his death in 1792. The feeling of those who knew him is best expressed in the epitaph written by Goldsmith in joke a good many years before, while the happy, brilliant company were still together:—

'Here Reynolds is laid, and to tell you my mind,
He has not left a wiser or better behind.
His pencil was striking, resistless, and grand;
His manners were gentle, compliant, and bland;
Still born to improve us in every part,
His pencil our faces, his manners our heart.'

MARY H. DEBENHAM.

THE SHIP OF DREAMS.

B EYOND the golden West
There lies the Isle of Rest,
Along the silver tideway to the moon:
Unfurl the silken sail!
Blown by the evening gale,
The Ship of Dreams will reach the elf-land soon!

Ah! little child, surprise
And joy are in your eyes
To view the wonders of that fairy Isle!
Here poppy buds unfold
To drop wee toys of gold—
Then gather them and play with them awhile.

And here, uprising, sing
White birds on flaming wing;
See! flights of scarlet butterflies at play:
Pink roses on each bough
Are whispering secrets now,
And you can hear the magic words they say.

There, down the forest glade,
With helmet, spear, and blade,
A troop of elfin knights go two by two;
To fight a dragon grim,
They ride in martial trim,
With flying flags of silver, green, and blue.

Now dawns the pearl-grey light
To tell of passing night—
Our Ship of Dreams no longer must delay:
It leaves the Isle of Rest
Far in the golden West,
And anchors in the harbour of the Day.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 35.)

'PLEASE, sir,' said Teddy, 'I believe I'm responsible. The beggar cheated me out of seven shillings, and I thought I'd teach him a lesson, so I just got the falls down and strung him up to the davits.'

'Oh, you did, did you?' said Captain Sprott, glowering at the ingenious O'Brien. 'And who told you you might make use of my ship to teach longshoremen lessons? Set up a school, you ought to. In my day I should have been belted round the main deck with a rope's end if I had cut such capers! Who's this?' turning to Marley, who was standing by.

'Please, sir, he's my assistant,' said Teddy, with a grin that for the life of him he could not suppress.

'Assistant!' cried the Captain. 'Your assistant! Assistant in mischief, I suppose. Well, well, cut away down, and tell Mr. Lockhead, the accountant, to have all papers ready at once, the Board of Trade will be here in an hour and the crew in less; tell him we leave on the afternoon tide.'

'Come along,' said Teddy to his friend.

He led the way along the main deck aft to the paying-out office, a small room built on deck just forward of the main saloon staircase.

Here, surrounded by books and papers, sat Mr. Lockhead, an old gentleman with white hair, a bothered expression of countenance, and gold spectacles, which he was always taking off and losing.

'Morning, Mr. Lockhead,' said Teddy. 'I hope you're well, sir?'

'Oh, is that you, O'Brien?' said the old gentleman, looking up from his work. 'Glad to see you; come in and sit down.'

As there was only one stool in the paying-out office, and Mr. Lockhead was perched on that, it was difficult to see how Teddy was to accept his invitation.

'This is Dick Marley, sir,' said Teddy, pulling Dick forward. 'We're signing him on as assistant accountant.'

'Oh, yes,' said the old gentleman, throwing his spectacles up on his forehead and looking at Marley. 'Mr. Roberts told me: coming for a voyage for his health. Well, well, there's no place like the sea for that. What was all that noise on deck I heard a moment ago?'

'I was hanging a longshoreman.'

'I beg your pardon?' said Mr. Lockhead.

'I got his boat under the starboard-quarter boat davits, and slung it up with the steam winch, and the captain came aboard.'

'Captain aboard?' cut in Mr. Lockhead.

'Yes, sir; and he says the crew will be off in a

jiffy, and the Board of Trade in an hour, and he wants all the papers ready.'

'Bless my soul!' cried Mr. Lockhead. 'Why didn't you tell me that at once instead of telling the yarn about longshoremen. Bless my heart, where are my spectacles?'

Teddy pretended not to hear the question, and nudged Marley as Mr. Lockhead plunged wildly about amongst his papers and books, looking for his spectacles.

'I had them a moment ago. One can't lay a thing down aboard this ship without losing it; bother those spectacles!' cried Mr. Lockhead, growing more excited and dashing books on the floor. 'I believe they have legs, and walk off of their own accord. I believe there's a brownie, or a pixie, or something in this paying-out office that walks off with my things. Why, bless me, they're on my forehead! *Thought* they were somewhere. Now, you Teddy O'Brien, just pick up those things and put 'em in order. That's right; now you can go off, and don't bother me, for I'll be busy till those Board of Trade men go.'

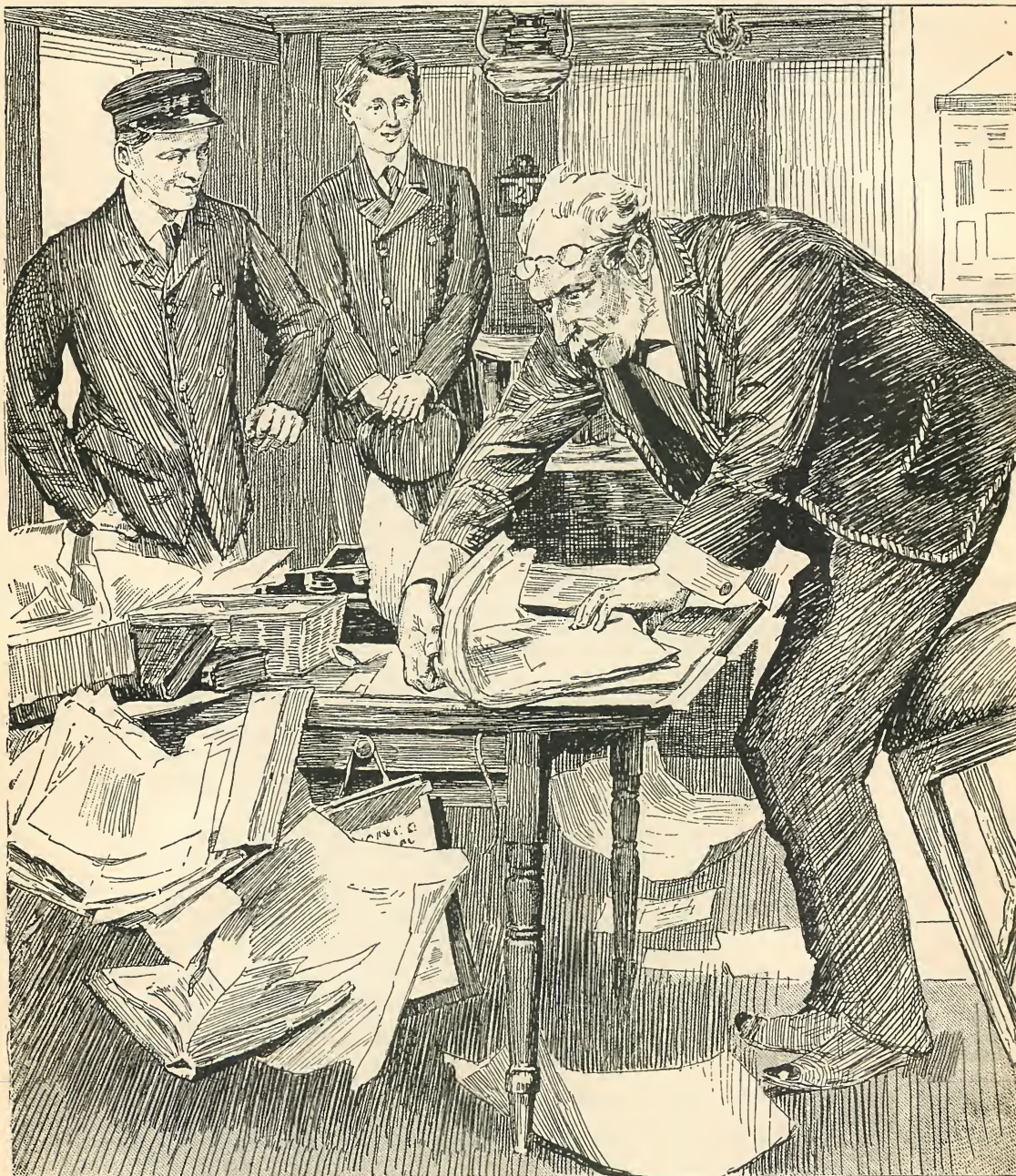
'He's the jolliest old chap,' said Teddy, as he led Marley away, 'but he's awfully muddle-headed, always losing his specs—always getting confused in his accounts, and he's the most absent-minded character; but you'll see more of him before you've done with him. Now, see here; this is the main saloon skylight. If you peep down, you can see a bit of the saloon; but don't bother, we will go down presently. I'll just show you over the decks.'

They walked forward under the narrow bridge where the officer of the watch always stands when at sea.

'This is the steam steering gear,' said Teddy, opening a door and disclosing a small engine. 'It's worked by steam from the main boilers. Long ago the wheel of a ship like this was so big and heavy, two men had to tackle it in bad weather; now they steer with a little bit of a wheel up there on the bridge, a wheel that a child could turn. This engine does all the work. Bless you, this ship is nothing but a nest of engines, all worked by steam from the main boilers. The winch that hove that longshoreman's boat up is the same: you just turn a tap, and you get the power.'

He led the way right forward to the bows. Here, forward of the foremast, the deck was cumbered with two great machines. The one on the port side was simply a big drum six feet in diameter, driven by a complication of cogwheels; the one on the starboard side was the motor.

'The picking-up gear,' said Teddy. 'You'll understand it better when you see it at work. It's the most powerful picking-up gear in the world, they say. The grapnel-rope goes round that drum and over that little wheel let into the bows, and the old grapnel is lowered till it touches the bottom; and then the ship steams along gently, and the grapnel goes dragging along the bottom, hopping over rocks and tearing up tufts of seaweed, till it comes across the cable; and then it seizes on to the cable like a bull-terrier to a bone, and they stop the ship and put the picking-up gear going; the drum goes round and winds up the rope and the grapnel, cable and all.'



“‘Where are my spectacles?’”

But you'll see it all when it's done, and that will explain it better than I can. Come along here.'

He led the way back to a deck-house forward of the funnel.

'This is the electric testing-room. Bother! the

door is locked, but you can look in at the window. They lay the end of the cable in here when they catch it, and then they speak through it to the shore. I've seen them, when we've picked a broken cable up in the Western Ocean, speaking through it to New

York, a thousand miles away. Hullo! here comes old Sloper.

A frightful-looking monkey had slid down a back-stay on to the roof of the testing-room, and was now grinning and chattering at O'Brien, and scratching himself at the same time.

(Continued on page 51.)



SIR JOSHUA REYNOLDS.

(See page 42.)

SOME FAMOUS CASTLES AND PALACES.

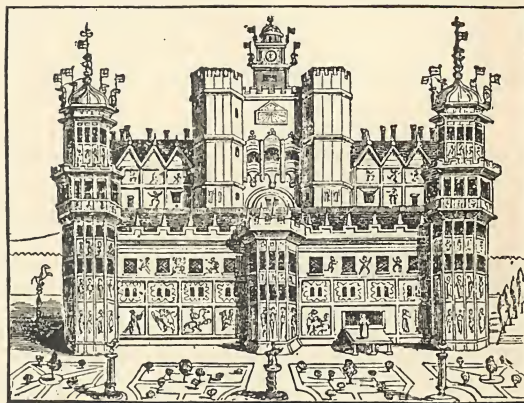
I.—NONSUCH PALACE.

MANY grand were the royal palaces scattered over England in the old time, which have now disappeared, and left no trace behind. There were some old palaces, however, which have been swept away themselves, but have been followed by modern ones, standing on the same ground. A very remarkable palace that has vanished entirely was that called Nonsuch. It was in Surrey, about twelve miles from London. Very likely it took the name from its splendour; there was no palace to be compared with it. Camden, the historian, said it was worthy of old Rome in its best days, and Leland called it a 'nonpareil.' One thing that this palace was remarkable for, we are told, was the large number of beautiful statues, collected from many lands.

We can fancy bluff King Hal, the eighth Henry, riding over the Surrey hills, seeking a pleasant spot for the palace, and choosing one near Ewell, not far from the well-known road to Brighton, now so often travelled by cyclists. The gate-house of the palace was three stories high, much ornamented; there were inner and outer courts surrounding the palace. In the middle of the front were two turrets, and another one at each corner; these were six stories high, and at the top people had a fine view of the gardens, park, and country beyond. The gardens were laid out after the French fashion of shrubberies with bowers, and there was a large deer-park.

Nonsuch Palace was unfinished when this king died, and the Earl of Arundel bought it of Queen

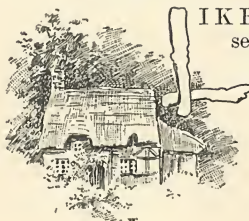
Mary, spending a good deal of money on its completion. But the palace was given back to royalty in 1591, and it became a favourite residence of Queen Elizabeth. It was at Nonsuch that the



Nonsuch Palace, from an old print.

Earl of Essex first offended her Majesty; he was executed at the Tower in 1601. After several changes, Charles II. granted Nonsuch to the Duchess of Cleveland, who pulled down the palace and sold the land.

THE LEAF BUTTERFLY.



LIKE most insects, butterflies seem, as a rule, weak, helpless, and unprotected creatures. We know that many larger animals, such as birds, lizards, chameleons, and frogs are always preying upon them; and we could almost wonder, when we think of the numbers of birds,

for instance, which are kept alive by the insects which they eat, how any of these little creatures are left alive. Bees, wasps, and hornets are armed with powerful stings, which are able to inflict very painful and sometimes dangerous wounds; and it is easy to see that few animals would attack one of these dangerous insects twice. But we are not always clever enough to see that insects have other ways of protecting themselves from their enemies, though we might guess that such was the case by the great numbers of insects which do escape all their enemies, and continually hurry to and fro in the enjoyment of a happy life.

The Leaf Butterfly shows us one way of obtaining protection without the help of a sting. There are two kinds of this insect—one of which is found in India, the other in Sumatra. They belong to the same family of butterflies as our Purple Emperor, and the two kinds are very similar. The leaf butterfly, whether of India or Sumatra, is a fairly large one, and the upper sides of its wings are strikingly coloured, being of a rich purple hue,

tinged here and there with a grey or ashy shade. Across the fore pair of wings there is a broad, orange-coloured band, so that when the insect is flying it is a striking creature, which a bird or reptile would quickly see. But when it is on the wing it is quite safe from most reptiles, and it flies so swiftly, and in such a zig-zag way, that it is generally safe even from birds. We may say, then, that its strong powers of flight are its protection when it is in the air.

When it alights, however, it is in immediate danger, and it would quickly be attacked but for one circumstance—its enemies cannot discover it. Even sharp-eyed men have looked straight at it as it entered a bush, and yet they have not been able to discover it. Perhaps as they were searching for it the butterfly has been startled, and has risen up from a branch under their very eyes, and flown away to another bush. Only after many very careful attempts have they at last been able to find it resting, and then they have been astonished at its wonderful resemblance to an old dried leaf. It sits with its body close to a stem, and folds its wings straight up over its back, as most other butterflies do when resting. The purple-coloured, orange-banded surfaces of the wings are placed face to face and hidden, while the under-surfaces, being now outwards, are in full view. These under-surfaces are shaped and marked exactly like a dead, brown leaf. The fore part of the wing is broadly pointed—the edge which goes round by the body is nicely curved, while the other edge is notched, as if partly eaten away by decay. The hind part of the wing is drawn out in a long, narrow point, which looks like the little piece of stalk by which a leaf is attached to the stem upon which it grows. The general colour of the wing is brown or red, like that of a dead leaf, but there is a black band running from the front point to the back one, which looks like the vein which runs down the centre of a leaf, and there are other black lines which look like the branching veins of the leaf. The whole under-surface of each wing—all, in fact, that shows—is an exact picture of a dead leaf.

The butterfly seems almost to know all this. Its instinct seems to lead it, when alighting on a bush, to settle among a bunch of decayed leaves rather than among fresh and green ones. It always rests on an upright twig or branch, and brings down the narrow points at the back of its wings until they touch the twig, and so seem to connect the leaf with its stem. It holds on to the twig by its fore-legs, and hides its body, its head, and its feelers between its wings, so that nothing can be seen but its wings and its fore-legs, and the latter are easily overlooked. The colouring of the wings is so exact that there are even little patches and blotches imitating the mould which gathers upon decaying leaves.

As the leaf butterfly lies at rest, no bird or lizard can detect it. It escapes attack by its wonderful resemblance to a dead leaf which is of no value to its enemies. It is, perhaps, the best example of this kind of protection which is to be found in the world, but it is not by any means the only one. Scores of insects, and even higher animals, are enabled by Providence to protect themselves, to some extent, in

the same way. Some are nearly as wonderful as the leaf butterfly, while others scarcely attract our notice at all. But if we look around us at the creatures which we may see daily in the country, and ask ourselves why one is one colour and another a different one, we shall soon see how much protection may be obtained in this way.

OPERATING ON AN ELEPHANT.

THE inhabitants of Cincinnati were enlivened by an elephant-hunt one afternoon, in consequence of the objection of Basil, the oldest elephant in the Zoo, to having his tail amputated.

Basil's ninety-fifth birthday, a few days before this event, was kept up with great honour, and he was allowed an unusual amount of dainties. Another elephant, who was jealous of Basil's popularity, chewed his tail, and blood-poisoning followed.

The authorities called in one of the surgeons of the municipal hospital, who advised amputation. Having no previous experience of elephants, however, he modestly gave way to a local veterinary surgeon.

Basil's attention was diverted by a liberal supply of food. While engaged in eating it, his feet were chained securely to the ground. He took no notice of these preparations, but when the surgeon cut through the offending tail with a sharp knife, Basil stopped his banquet and trumpeted his surprise and resentment. Before he could fully grasp the situation, however, he was tailless.

He might have endured this, but for the added insult of cauterising the wound with a red-hot poker. When the poker was applied, Basil gave one mighty tug, pulled out all his chain-fastenings, and then started on a career of crime.

His attendants bolted out of the elephant-house, and scattered in all directions. As the memory of the red-hot poker grew on him, Basil became more and more excited, and he finally left the elephant-house by battering down the wall.

Four other elephants were so alarmed at this feat that they likewise broke their chains, and followed Basil through the gap in the wall. The elephants dashed through the park and into the city streets. Traffic was suspended, and people fled into shops and offices in wild panic. A number of horses became unmanageable through fear, and charged down the street.

The elephants were recaptured after a four hours' chase, in which hundreds of persons joined. The operating surgeon was badly hurt by falling timbers when the elephants broke down the wall of their house, and several keepers were likewise injured.

A BRAVE CORPORAL.

A CORPORAL who had fought bravely at the battle of Waterloo, was asked some years afterwards if he had not been afraid.

'Afraid!' he answered quietly—'no; I had been in all the battles of the Peninsula.'

'But I mean,' continued his friend, 'were you not afraid of losing the battle?'

'No, no!' replied the corporal, 'I was not afraid of that, but I was afraid at one time that we should all be killed before we had had time to win it.'

ROUND THE CAMP-FIRE.

I.—NO LOVE LIKE A MOTHER'S.

'I'M going to tell you a story,' said Vandeleur, 'which you may suspect to be wholly, or partly, a thing of imagination; but I assure you——'
'Thoughts are free!' said Bobby, with a laugh; 'you don't suppose we should be so rude as to express a doubt, even though we felt it; but I refuse to make any promises as to my private opinions——'

'Go on; don't mind Bobby!' said Ralph. 'Bobby's opinion is never worth counting. Keep us awake—that's the main thing!'

'Don't use long words, Vandeleur, or Ralph won't understand,' Bobby retaliated; 'tell him any cock-and-bull story in two-syllable words, and he will be charmed, and believe every scrap of it.'

'He can believe it or not, and so can you,' Vandeleur laughed; 'but as the story tends rather to my discredit, in a way, I should fancy you will both be only too pleased to believe it. I don't think I am generally considered a cowardly sort of person——'

'Again I say, "Thoughts are free!"' murmured Bobby.

But one day (Vandeleur continued) when I was after lions in Somaliland with Baxter, I behaved like the most nervous of novices. Baxter had toothache, and remained in camp, and our head Kaffir shikari (hunter), who had seen signs of the presence of lions, accompanied me in order to locate the beasts, and, if possible, get a shot at them. We took with us a couple of ordinary Kaffir ox-herds, the fellows who looked after my team, to act as beaters in case it should be possible and advisable to make a kind of battue for the animals, though I knew very well what their 'beating' would consist of. At the first hint of a lion's presence within a mile or two, each of the brave fellows would climb a tree and remain there, either until I should have scared the brutes away by firing a shot at them, or until they had convinced themselves that the lions had departed of their own accord.

Well, it so happened that we sighted a lion. We had observed a herd of springbok in the distance, and while the shikari and I were watching these, and wondering whether it would be advisable to make sure of a nice dinner of roast antelope or continue our wanderings in search of the lions, we suddenly noticed the herd take to their heels and fly like the wind, while a yellow object emerged rapidly from behind the scrub and, after galloping a hundred yards as though in pursuit, stood looking after them. A moment later a loud roar reached our ears: old King Leo had missed his rush, and his dinner had escaped him. He stood and roared at his should-have-been victims awhile, then he turned and trotted sulkily back into the scrub from which he had emerged, a very angry lion, without doubt, and a hungry one for certain, since he was hunting by daylight; not a pleasant beast, I thought to myself, to meet after dark!

I consulted with the shikari, who bravely suggested that he should proceed with his Kaffirs

towards the spot where we had viewed the lion, but from a point beyond, in the hopes of driving him within shot of me—a faint chance, of course, but still a possibility, and as such acceptable to me. Therefore I posted myself behind a thick-growing shrub, of which there were a good many about, and leaning my back against a big tree, the only one within a mile, and therefore a splendid landmark for the beaters, made myself thoroughly comfortable.

Needless to say, the day being hot, and the time occupied by the Kaffirs in 'surrounding' the game being very long, I fell asleep. How long I lay unconscious I am unable to say, but I should think I must have slept for two hours at least, when a terrific noise awoke me with a start, and I sprang to my feet. The noise, as now my half-sleeping senses plainly recognised, was the roar of a male lion, very close at hand.

Now, a man who is startled out of his wits is, as the term implies, unable to act with discretion; he is for the moment, and after a fashion, insane. I suppose I was so, at any rate, for I certainly acted in the maddest and most foolish manner possible, for upon springing to my feet and catching sight of a huge lion, apparently about to spring upon me, I did not dart for my rifle, which had rolled out of my hands as I slept and lay a yard or two away from me, but made a wild leap for a branch of the tree under which I had rested, seized the bough, and swung myself up by 'circling the bar'—you know the gymnasium term—and thus placing myself out of danger for the moment. The lion did not charge. I suppose that my sudden movement startled him, for, instead of springing, he crouched and watched me, moving his head up and down for all the world like a huge kitten that watches a swinging cord.

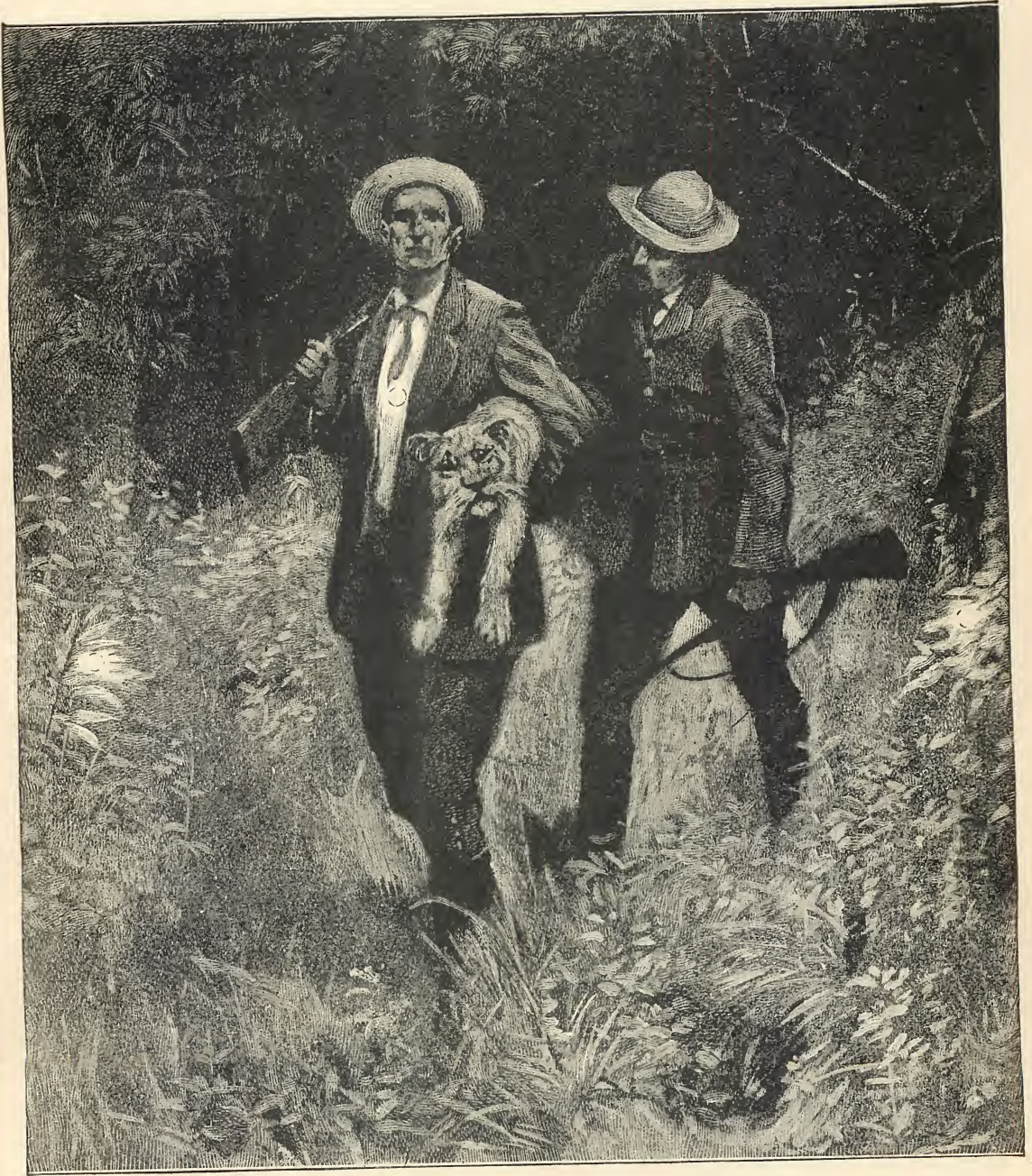
Suddenly the beast stood up again, uttering a loud roar. 'Oh, for my rifle!' I thought. I could see it lying close to the tree—my '50 Express, one bark from whose little round mouth was enough to silence the largest lion. 'Get out, you ugly beast!' I yelled at him; but except that he crouched once more for a moment, the remark made no impression upon the beast. He simply lay and watched me, occasionally opening his mouth to snarl and show his teeth, which were magnificent. He was, indeed, a splendid great lion; I have rarely seen a larger.

I shouted aloud for my shikari, who carried my second rifle, hoping, though scarcely expecting, that he would hear me and come. As a matter of fact, he did neither. That is, he afterwards explained that he had heard neither the roar of the lion nor my own shout for assistance. I am perfectly certain that he heard at least the first. As for the two Kaffirs, they afterwards admitted that, hearing the lion roar close to the spot where I had been left alone, but hearing no shot fired by me in response, they had instantly come to the most melancholy conclusion as to myself, and returning quickly to the camp, informed my chum concisely, but with a flattering display of sorrow, that a big lion had not only killed, but had also eaten me. But Baxter was a sceptic with regard to the truth-telling of Kaffirs, and, mistrusting the story of these two good fellows, he sallied forth in hope of finding me.

(Concluded on page 50.)



“‘I swung myself up.’”



"We brought the lion cub back to camp."

ROUND THE CAMP-FIRE.

I.—NO LOVE LIKE A MOTHER'S.

(Concluded from page 47.)

MEANWHILE, my friend the lion, after watching me for an hour, came nearer, evidently desiring to make a closer inspection. He came right up to the tree, and once he leaped up at it, tearing at the bark with his claws. Finding that this did not bring the tree down, he suddenly turned his back upon me and roared very loudly five or six times. The terrific noise seemed to make me foolish.

'I know what that's for,' I shouted at him; 'it's to summon your wife for a consultation; but you may consult all night and you won't learn to climb a tree!'

Sure enough, before five minutes had passed, there came bounding into sight two beautiful little cubs of a few months of age, and a great lioness, the wife of my lord. I gave a sudden view-halloo, and away went all four as suddenly as they had appeared. For a while I waited, wondering whether I might venture down to fetch my rifle. Then, after waiting ten minutes and hearing no sound, I began to climb earthwards. Suddenly, with a nerve-destroying roar, Leo reappeared upon the scene, jumping into the open space like a flash of yellow light—and up again went I as quickly. There followed his two children and his faithful lady, and for a moment the pleasure of watching them almost caused me to forget that my position was really a very unpleasant one.

Then suddenly a startling change came over the aspect of affairs. There came the sharp report of a rifle, and a second. Up sprang the father lion; he sprang high in the air, but fell back to earth, no more beautiful, no more terrible than a log of wood—he was dead. At his side lay one of the little princes, his sons.

'Vandeleur!' shouted my chum, 'where are you?'

I can tell you that I climbed down from that tree without much conceit left in me, and I dare say I deserved the hearty burst of laughter with which Baxter greeted me. But there was no time for chaff.

'Let's catch one of the youngsters,' he cried; 'the lioness has gone right away—the cub won't go far; he will be waiting about for his brother. I want to make a presentation to the dear old Zoo at home, and this is a glorious opportunity!'

So Baxter and I followed the spoor of that cub, and were fortunate enough to catch him. We brought him back to camp presently, and fed him with bits of antelope, which at first he refused to touch, but of which he partook pretty freely when our backs were turned.

That night we heard strange noises within the zareba, or thorn hedge, round our little camp. Baxter thought some rascal of a veldt thief had been trying to break his way over the prickly hedge, but upon getting up and making a search with a lantern, he could find nothing. On the following night our little prisoner whined a good deal, and kept us awake. Baxter declared that we had been too

generous with our antelope flesh, and that the poor thing had a pain. I believe, as a matter of fact, that he was perfectly correct.

Well, we had all fallen asleep at length, and the cub was quiet, when suddenly a tremendous commotion arose. The two Kaffirs, sleeping under the covered waggon, yelled as though some one were slowly murdering them; at the same time there came a bang and a great sound of scraping and rending of the wooden side of the vehicle in which both Baxter and I were lying. Besides ourselves, the only occupant of the waggon was his lordship, young Prince Leo, who slept in a large packing-case, the top of which was covered with wire-netting. Both of us sprang out into the open air. 'What is it—what has happened?' we asked in a breath.

'The lioness! the lioness!' cried the Kaffirs. 'We saw her spring over the zareba and right upon the side of the waggon; she came for her cub; give it her, or we are all dead men!'

'Has she gone?' we asked.

'She has gone; she sprang back again when we shouted; but she will return!'

'Baxter,' I said, 'she's a plucky mother. She deserves to have her child back—what think you?'

Baxter thought as I did. 'Light a lantern,' he suggested, 'and we will put the box outside the zareba. When she comes—if she does—we will turn the light upon her and see what she will do.'

We did so, and my young lord Leo gave tongue very heartily during the process—loud enough to attract his mother. Then we retired to watch. Presently the mother arrived and found him. We turned the light so that we could watch, but even the glare of the lantern was insufficient to deter that brave and faithful parent. She turned her face and roared, indeed, in our direction, but she attacked that packing-case with tooth and claw until she had released his little lordship. This done, she caught him by the nape of the neck and carried him off into the darkness; 'and,' added Vandeleur, 'you chaps may believe it or not, but it was a pretty sight, and did one good. What won't a mother do for her child? I assure you the picture made me think of my own dear old mother, and recall the countless sweet and self-sacrificing things she had done for me through life—it did, indeed! I'm glad we gave the lioness back her child, and I hope the little beggar has proved a good son to her.'

IN A BOAT.

OUT in a boat on the blue, blue sea,
Sailing as fast as we can—
That is what I shall do every day,
When I am a grown-up man.

I'll hoist my sail and put out to sea,
Whenever the wind blows fast;
If I sail on, who knows but I may
Come to Fairyland at the last?

I'll stay there awhile, but not for long,
For at home they'll watch for me;
But just as now I will turn my boat,
And sail back in time for tea.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 45.)

CHAPTER VI.—SIGNING ON.

SLOPER, not to put too fine a point upon it, was a desperate-looking animal. He seemed a mixture of an ordinary barrel organ-grinder's monkey and a Mandril, with a deal of a Wanderoo and the mind and manners of a London Hooligan.

He would drink and eat with the crew, and had been known to smoke a pipe. He would steal anything, and hide it anywhere, just for the pleasure of being wicked, and he was the pet and darling of the *Kingfisher's* crew.

He had an admiral's uniform and cocked hat made for him by the bo'sun, and these would be put on him for state occasions; for the merchant seaman has very little love for the King's Navy, chiefly because the King's officer is so overbearing towards the merchant seaman; and in Jack's simple mind, a monkey dressed up as an admiral is a fine piece of sarcasm and a set-off against old affronts.

'Hullo, Sloper!' cried Teddy; 'how do? What's the matter with the beggar, I wonder? Oh, I know! I promised him some nuts when I came back, and I have gone and forgotten them.'

'But surely,' said Dick, 'he wouldn't have understood you, or remembered?'

'Wouldn't he? You look! See here, Sloper!'

Teddy turned one of his pockets inside out, to signify 'No nuts,' and Sloper began to skip and chatter and show his teeth.

'Look at the wax he's in. Remember! Why, bless you, Sloper never forgets anything, and I believe he knows everything you say—every word. Look at him now!'

The creature had rushed up the rigging again, along the mainyard, and was hanging by his tail from an ear-ring, looking not unlike an enormous brown cocoa-nut, chattering and jabbering all the time, and swinging from side to side like a pendulum.

'Come on,' said Teddy, 'he will swing there for half an hour, till he gets his temper back. Let's go aft. Here are the crew coming on board.'

Two boats were locked on to the starboard side companion-way, and about twenty sailor-men, all with boxes, bags, and bundles of every description, were swarming up, laughing and chattering; talking to each other in different languages, till it sounded, as Teddy said, like the tower of Babel coming up the side.

'I fancy,' said Teddy, when the lot were on deck, 'they're a tough-looking crowd!'

They certainly were. There were only three Englishmen; the rest were 'Dutchmen,' 'Dagoes,' with rings in their ears, a Spaniard or two, and a Russian Finn, an extraordinary-looking man, with red hair and whiskers and a hare-lip that made him speak in a whistling kind of way that you didn't easily forget once you heard it.

'They are that,' said Mr. McGrath, the chief engineer, a big, stout man, who was standing close by; 'but they're not much different from other

crews nowadays. The English merchant navy is worked nowadays by foreigners, and, in my opinion, in a few more years there won't be an English sailor-man left.'

'McGrath is always grumbling,' whispered O'Brien to Dick; 'but come downstairs: the officers and stewards, and so on, sign on in the saloon.'

In the saloon there was a little crowd round the end of the long dining-table, where the Board of Trade official sat in his glory, surrounded with papers.

The crowd consisted of all the officers of the ship, the cook, assistant-cook, and the stewards.

The Board of Trade official read the articles, setting forth that each man was bound to serve the ship between latitude twenty degrees north and twenty degrees south, wherever she might go; the conditions, pay, &c.

Then each man signed, and the articles were taken on deck and read over to the foremast hands and stokers, half of whom did not understand two words of what they heard.

CHAPTER VII.—THE START.

LUNCHEON was served in the saloon at one: a luncheon that would have opened the eyes of the poor old sailor-men described by Clark Russell and Dana. Soup and fish and curry, grilled fowl, tarts, all sorts of pastry, cheese and celery. Dick Marley could not help thinking of Hannah, and the provisions she had packed away for him.

He was seated beside O'Brien and opposite Mr. Jones, the third officer, a young and joyous sort of character, who played the banjo, and took life pretty much as it came. Beside Jones sat Mr. Toms, the cable engineer, a vast and solemn-looking man, with a black beard.

'Toms is an awfully decent chap,' whispered Teddy; 'but, my goodness, the yarns he tells! He does draw the long-bow when he gets started.'

'Has any one seen old Sloper?' asked Jones. 'I've only just come aboard, and haven't had time to look for him yet.'

'I saw him,' said Teddy, 'and he was in a furious wax, because I promised him some nuts and forgot them.'

'I beg your pardon,' said Mr. Toms, 'you promised him nuts. How long ago may I ask?'

'Two months nearly.'

'And do you mean to imply that he understood you, and remembered your promise?'

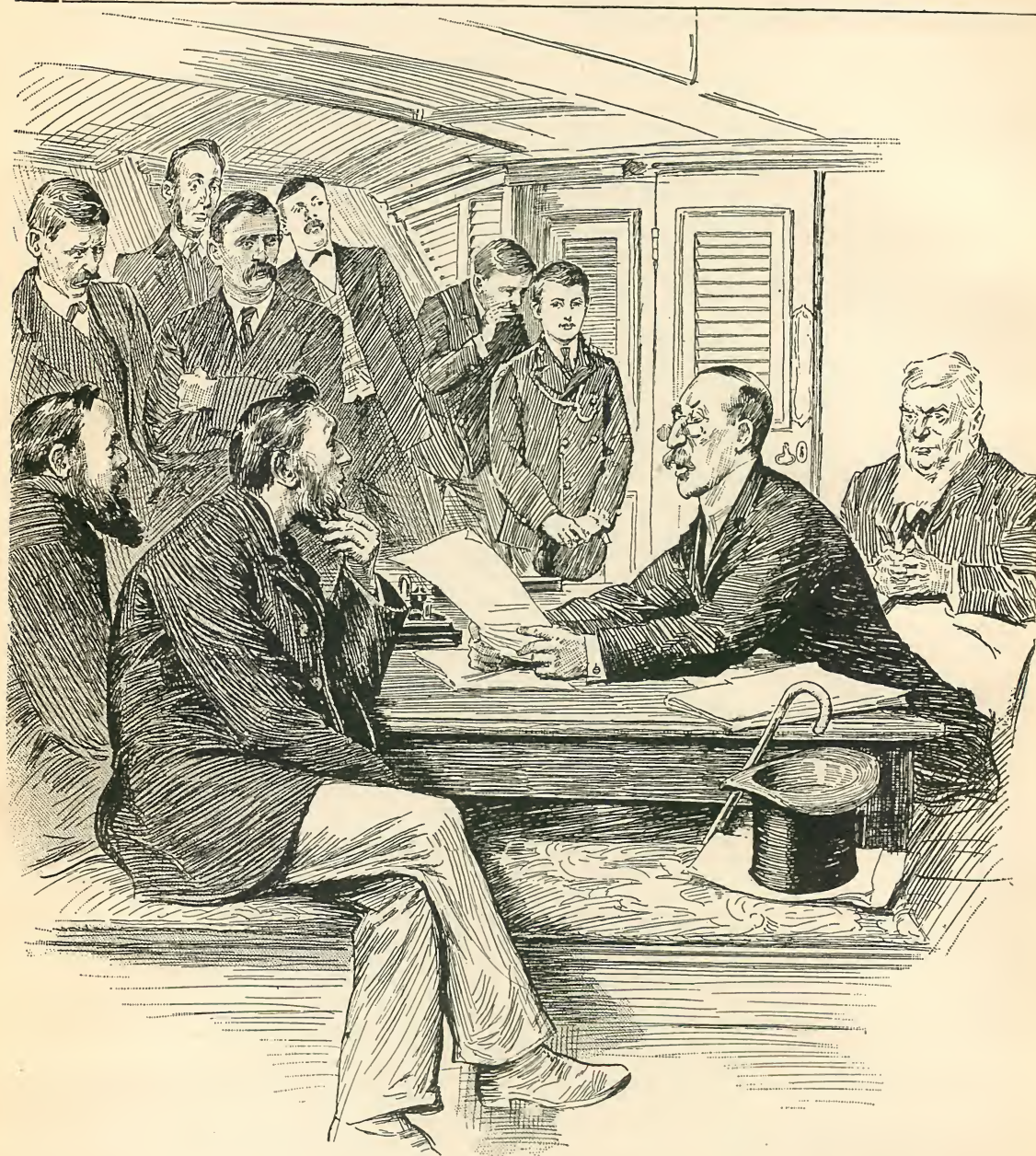
'Course he did.'

Mr. Toms sighed, and helped himself to some salad. 'It is wonderful,' he said, 'how people delude themselves about animals. Now, Sloper is a monkey very much down in the monkey scale. I have studied the beast, and know. He is as different in intellect from the bob-tailed chimpanzee of the Upper Congo as you are, Teddy, from the Astronomer-Royal or—myself.'

'What do you know about the bob-tailed chimpanzees, sir?' asked Teddy, nudging Dick.

'I? Nothing personally, but my friend, Lars Petersen, a Danish explorer, knows a lot; for he was a prisoner of theirs for over three years.'

'A prisoner?'



"The Board of Trade official read the articles."

'Yes, he was caught by them and taken off, tied hand and foot. They marched him——'

'Tied hand and foot?' put in Jones.

'I said they marched *with* him, tied hand and foot, strapped down in a rude sort of palanquin, made of

boughs, forty or fifty miles into the jungle, till they came to a ruined city, which was their headquarters. There they kept him a slave—a menial slave—for three years. He told me the cleverness of these creatures no one would believe.'

'I'm with him there,' murmured Jones.
'They had a Governor and a rude sort of Parliament—'

'Very rude, I should think,' muttered Teddy.

'They could count up to thirty; they could converse one with another in a language of which he made a vocabulary, which he is about to publish—'

'For the use of apes?' asked Mr. McGrath, who was seated next Mr. Jones, and who had overheard the foregoing remarks.

'I don't know if you wish to try and cast discredit on the story of my friend Petersen, Mr. McGrath,' said Mr. Toms in a pained voice. 'All I can say is, I have never heard him tell a lie, and I have seen the proof-sheets of the work in question.'

'Who's the publisher?'

'Pass me the cheese, please,' answered Mr. Toms.

'The worst of him is,' said Teddy, as they went on deck, 'he's always accusing people of not speaking the truth.'

(Continued on page 63.)

INSTEAD OF THE SUN.

II.—MAKING A LIGHT.



WHEN we wish to make a light for any purpose, we usually strike a match. An ordinary match, though it looks so simple, is really a thing upon which much thought and labour have been spent. The stick is simple enough, but that which we call the brimstone is a complex substance which can only be made by some one with a knowledge of chemistry. No savage anywhere in the world knows how to make an

ordinary match, though most of them quickly learn to use matches when they can obtain them from Europeans.

All savages, in hot countries as well as cold ones, make use of fires, and they have learned how to light them without the help of matches. They all adopt one or the other of two ways. The first is to rub two pieces of wood together until they take fire; the other is to obtain sparks by striking two hard stones against each other.

When the Australian bushman wishes to make a fire, he takes two pieces of light wood, usually pieces of cork-tree or black fig, each of which is about a foot long. He lays one of them, a flat piece, on the ground, and collects a few dry leaves round it. Placing one knee on each end of the stick to hold it firm, he squats upon his heels, and taking the other stick, which is thin and pointed, he places its point upon the stick beneath his knees, and twirls it like a drill, by rolling it between his palms. The point bores into the soft wood, rubbing up a little fine dust, which in a few seconds begins to smoke, and soon throws out a few red-hot sparks, which fall

upon the dry leaves and set them on fire. Dropping his drill, the bushman blows upon the leaves until they are well ablaze, then he puts on dry firewood, and soon has a bright, warm fire.

And now let us look at a slightly different way of doing the same thing. A traveller, who has made



Striking a Light with Flint, Steel, Tinder-box, Matches, and Candle.

several voyages among the Malay Islands in native boats, has explained the way in which the Malay sailors obtain the light for their fires. They took a piece of split bamboo and made a notch across the concave or hollow side of it, then, with another piece of bamboo, sharp-edged, they rubbed or sawed into the notch, slowly at first, but with a quicker movement as the operation proceeded. The fine dust which the saw rubbed off fell through the notch in the lower piece of bamboo and dropped upon the dried leaves, moss, or other light material which had been prepared to receive it. After a little time the dust took fire and kindled the materials upon which it fell.

These two ways of making fire represent two great classes. They are known, one as the fire-drill, the other as the stick and groove; and all savages who obtain their fires by the friction of two sticks make use of one or the other.

The natives of Tierra del Fuego show us how a light may be obtained by striking two hard stones together. They make a little pile of the light, fluffy down of birds, and selecting two hard pieces of stone, usually a kind known as iron pyrites, they strike them together and let the sparks fall into the down. As soon as the latter is kindled, the savages blow it into a flame and place small dry twigs upon it.

This method of making a fire is adopted all over the world. In those countries where iron is smelted,

a piece of steel is frequently used in place of one of the stones, and the stone usually chosen to go with it is a small flint. Before our common matches were invented, flint and steel were used in nearly every house in England when it was necessary to obtain a light. This was, indeed, the most convenient way of 'striking a light' which was known anywhere a hundred years ago. Instead, however, of letting the sparks fall on dried leaves or moss, our forefathers prepared a substitute by burning or charring linen rags and picking them to shreds. These burnt fragments and shreds, known as tinder, were kept along with the flint and the steel in a tinder-box, which was generally placed on the mantel above the fireplace. Although lucifer matches, which can be lighted by simply rubbing them against a rough surface, were not then known, there was a kind of long, thin, flat match tipped at each end with brimstone or sulphur, a substance which catches fire very readily. A few of these matches were placed in the tinder-box along with the tinder.

When it was desired to make a light, the matches, flint, and steel were taken out of the box, while the tinder was left in. The steel, which was usually shaped rather like the letter U, was struck against the flint, and the sparks were allowed to fall upon the tinder, some of which caught fire, and began to smoulder. The brimstone tip of one of the matches was applied to the tinder, and at once burst into flame and set fire to the wood of the match. The latter was then used to light a fire or a candle, just as we should now use a match, and when that was done the tinder was 'damped,' or smothered out, so that what was left might serve for another occasion.

W. A. ATKINSON.

TWO ROYAL MARGARETS.

II.—MARGARET TUDOR.

THE baby Princess who was born at Westminster Palace on the 29th November, 1489, was a very important little person. For more than two hundred years the sister kingdoms of England and Scotland had been at war, and her father, King Henry VII., wisely thinking that it was time this state of things should end, purposed to use his baby daughter as a peacemaker, by offering her as a future bride to the Scotch king, and promising that the marriage should take place as soon as she was old enough.

With this end in view he paid the compliment to the Scotch nation of having her baptized by the name of Margaret, on St. Andrew's Day, in the church at Westminster dedicated to St. Margaret of Scotland. The ceremony was exceedingly magnificent, the silver font from Canterbury Cathedral being brought to the church for the occasion; and afterwards the baby princess was borne back to the palace under a silken canopy carried by four knights.

The little girl grew up at Sheen Palace with her two brothers, Arthur and Henry, for playfellows, under the charge of her governess, Lady Guildford; her grandmother, Margaret of Richmond, one of the most learned women in Europe, superintending her

education. Her granddaughter did not follow in her steps, however, for Margaret was ever a sad dunce, though she could dance well and play on the lute. Her careless, happy girlhood at Sheen soon came to an end, for when she reached the age of thirteen arrangements were made for her betrothal to the Scotch king.

At one time it had seemed unlikely that this marriage would ever take place, for James of Scotland was eighteen years older than the Princess, and in spite of the plans which had been made at her birth, it could hardly be expected that he would wait for a wife till she was old enough to marry him. In fact he had married a beautiful young lady called Lady Margaret Drummond, but a tragic fate overtook her. She was poisoned at breakfast, along with her two sisters, by a secret enemy, so that James was now at liberty to fulfil his promise.

He did not go in person to London, but sent as his proxy the Earl of Bothwell, to whom, in the name of James, Margaret was betrothed in the presence of her father and mother, and the great English lords and bishops, as well as many Scotch lords, who had come to London for the occasion.

One question and answer given during the betrothal brings to our minds the youth of the poor little bride. The Archbishop of Glasgow asked her 'whether she was content, of her own free will and without compulsion, to wed his master,' and the childish answer was, 'If it please my lord and father the King, and my lady mother the Queen, I am content.'

Poor child! soon she had no mother's wishes to study, for only a few days after this her mother died, to the great sorrow of all her family.

Margaret's betrothal took place in January, but it was not till the following June that she set out for the north, escorted by many of the nobility and by the Scottish lords who had come to fetch her.

Her father accompanied her as far as Collestown, in Northamptonshire, where her grandmother lived, and where the whole company spent a few days, and were royally entertained. Here Henry said good-bye to his daughter in the presence of her retinue, giving her a book of prayers as a parting gift.

Then the little girl set out in great state for her northern home, riding on a white palfrey, with a bodyguard of footmen behind. Behind the footmen was carried a litter, in which the little Queen could lie when she was tired of riding, and behind the litter rode her ladies on beautiful palfreys. Then followed knights; then minstrels and trumpeters, who played on their instruments when they passed through any town. It must have been an imposing procession, a truly 'Royal Progress.'

It took nearly a month to reach Edinburgh, as stoppages were made at many large castles and important towns. The last resting-place was Dalkeith Palace, where the King was expected to meet his bride.

She arrived first, and while her ladies were busy decking out their little mistress in her finest gown, the King was on his way from Edinburgh. Hearing that Margaret had arrived, he did not wait for ceremony, but, putting spurs to his horse, he galloped to Dalkeith and appeared before her dressed simply in a

hunting suit, which perhaps after all best suited his manly beauty.

After welcoming her and supping with her, he returned to Edinburgh, while she remained for the night at Dalkeith to encounter her first danger on Scottish soil, for in the night fire broke out in the castle, and was only extinguished after much trouble, and then it was found that the stables had been destroyed and that Margaret's two white palfreys had perished. One of them was a special pet of hers, and she cried all the next morning for its loss; even the King, who came from Edinburgh to comfort her, could not do so.

After this accident the party removed to New Battle Abbey, where feasting, dancing, and sports went on for four days, after which—the King having meanwhile procured fresh palfreys—they rode in state to Holyrood, on the 5th of August, 1503, the Queen riding on a pillion behind the King; and they were married in the Abbey Church of Holyrood next day with great ceremony.

The marriage, thus romantically began, did not, however, prove a very happy one. It could hardly be expected that it would, for Margaret was more or less a spoilt child; and, to judge by some of her letters to her father, she had also a sullen and jealous temper. Besides, what perhaps can hardly be wondered at—considering the difference in their ages—her husband and she had not a taste in common, except a love of music.

Four little children came to gladden their home, but the three eldest all died in infancy; and ten years after her marriage war again broke out between England and Scotland, and James fell dead among the best and bravest of his subjects on the battlefield of Flodden.

Margaret found herself sole guardian of her little son—the little King James V.—who was, as she wrote to her brother, Henry VIII., 'very small and tender, being only one year and seven months old.'

By her husband's will Margaret was to be Regent of Scotland until her son came of age, unless she married again, in which case all power went out of her hands. One would have expected her to have been content to devote her life to her country and to her son, for it was a great responsibility to have the bringing-up of a king. But her restless nature was not satisfied with this lot. Within a year of her husband's death she married secretly Archibald, Earl of Angus, who was five years younger than herself. When this marriage became public, the anger of the whole Scottish nation knew no bounds. She was deposed from the Regency, and the charge of her son was taken from her and given to Sir David Lindsay, of the Mount, an old knight, who tended the royal boy with jealous care.

Margaret's life after this was full of trouble and unrest. Her husband Angus neglected her, and in some ways perhaps she neglected him; in any case the marriage was unhappy. Sometimes she lived in Scotland, sometimes in England at the Court of her brother Henry. She had had it in her power to be a great and wise ruler, but she threw away this power for that which only brought her sorrow. She died at the Castle of Methven in 1541, in the fifty-first year of her age.

COMPANIONSHIP.

MANY years ago, when the Indians of North America still roamed freely over their native prairies, a traveller set out on a long journey, which would take him hundreds of miles across the open country. He was accompanied only by a faithful horse, named Charlie, which he had bought from an Indian tribe. Day by day they journeyed on together, and every night they slept together on the open prairie, the horse fastened near to his master's head by means of a lasso and peg.

One evening, as the traveller sat by his fire taking his supper, the horse slipped his lasso and set out to forage for himself. The traveller was alarmed at once. He was in the open country, across which great numbers of wild horses roamed as they liked, finding abundance of pasture everywhere. If his horse escaped him, and took to a wandering life, the man would be left alone in a wilderness to find his way back to civilised regions as best he could on foot. He took the lasso, and started in pursuit of his horse.

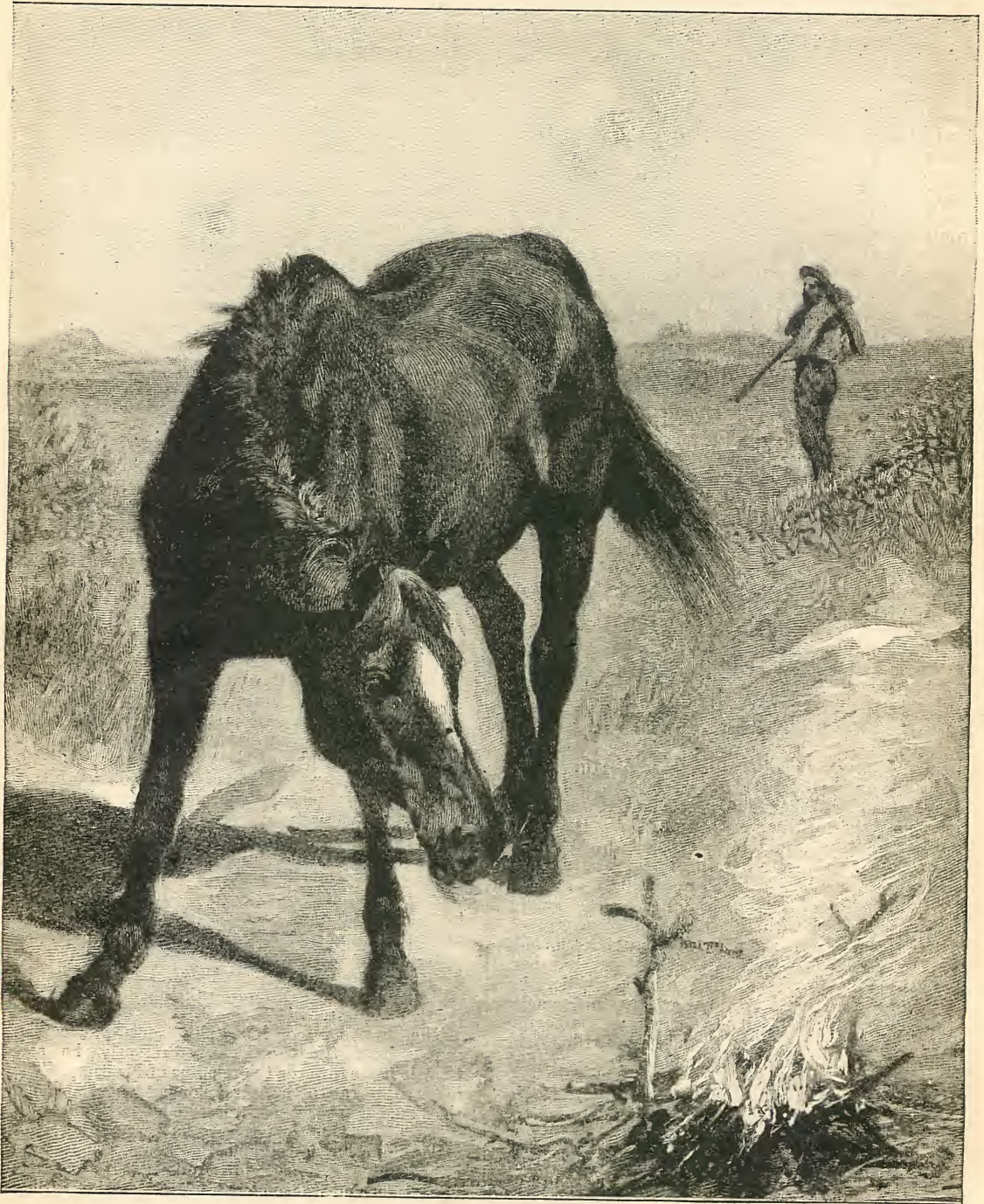
But Charlie had no mind to be caught, and kept out of his master's reach. The man followed him for half a mile or more, but, as night was coming on, he was obliged to give up his attempts, and he returned in sadness to his fire and laid himself down to sleep.

In the middle of the night he was suddenly waked, and saw a dim form standing over him, which he took at first to be a Red Indian about to attack him. But on recovering a little from his fright, he discovered that it was Charlie, who had returned of his own accord to sleep by him; so the traveller turned over contentedly and fell asleep again.

He awoke at sunrise, and saw the horse grazing a short distance away. He prepared his breakfast and ate it, and then he started once more to see if he could catch his horse. But Charlie had still no thought of giving up his liberty, and he drew off as his master approached. The traveller spent half an hour trying to catch the wary animal; then, finding his efforts fruitless, he paused to think the matter over. He recalled to mind how the horse had returned in the loneliness of the night to share his company, and he resolved to try if he could bring him back by means of a trick. He returned to the fire, packed up his things, shouldered the saddle, and started off on his journey alone. When he had gone a quarter of a mile he looked back, and saw Charlie, with his head and tail high in the air, looking rather puzzled and uneasy.

The traveller continued his journey, looking round from time to time. Presently he saw Charlie make towards the remains of his camp. The horse sniffed at the fire for a moment, then, realising that the camp was indeed deserted, he set off at full speed towards his master. As he passed, the latter called him by name, and the horse stopped and allowed himself to be saddled quietly. He trembled very much, and was evidently greatly afraid of being deserted.

ALWAYS end a meal with an appetite, and you will never begin a meal without one.—*Old Proverb.*



“The horse sniffed at the fire for a moment.”



“He wrote at Marco Polo's dictation.”

MARCO OF THE MILLIONS.

ON a September day in the year 1298, the streets of Genoa were thronged with people, hurrying to the harbour to welcome the victorious fleet, returning from the sea-fight of Carzola. Venice, the great rival of Genoa, had been utterly defeated, sixty-six of her galleys had been destroyed, and eighteen more were being brought proudly into the Gulf of Genoa.

Very bitter must have been the thoughts of the conquered admiral, Andria Dandolo, chained to the mast of his own galley as the chief prize of the war. He must have known how little sympathy he would meet at home, for Venice had small mercy for failure, and her conquered captains had nothing but death or imprisonment to look for on their return. And so the admiral, who had the courage to fight, but lacked the higher courage to face failure, struggled with his bonds until he could dash his head against the mast, and so found the death which had been denied to him in battle. The other captains were confined in the Genoese prisons, there to wait, with such patience as they could muster, until a truce, an exchange of prisoners, or a ransom sent from home should open the gates for them.

There was one man among them who must have learnt, by strange experience of life and its ups and downs, to bear changes and hardships with indifference. He was one of those 'gentlemen commanders,' as they were called, who sailed with each galley; his neighbours, the young gentlemen of Venice, had a nickname for him, 'Marco of the Millions,' and we know him as the greatest of mediæval travellers, Marco Polo.

Three years before, this same Marco, in company with his father and uncle, had stood knocking at the gate of his old home in Venice. It was twenty-four years since they had left home, when Marco was a lad of fifteen, and they had been in the meantime to lands which, for nearly a hundred years after, were unknown to Europeans. They had been to the Court of Cathay, or, as we should say, China, the honoured guests of the great monarch, Kublai Khan, and the young Marco had acted as his ambassador to many an outlandish Eastern potentate. It was small wonder that this middle-aged, travel-stained man, speaking the Eastern tongues more easily than his own, was unrecognisable by the neighbours who had bidden farewell to the clever, high-spirited lad, nearly a quarter of a century ago. But there were plenty of people ready to claim acquaintance with the travellers when, after inviting all the neighbourhood to supper, they sent for their heavy travelling-coats, opened the seams, and displayed concealed within them precious stones of immense value. The guests stared in amazement, as rubies, emeralds, and diamonds appeared, and they learnt that their value in money had been the parting gift of the great monarch of Cathay.

It was Marco's stories of the revenues of the Eastern princes, always reckoned by millions, which had won for him his nickname amongst the neighbours, who perhaps suspected him of improving upon his tales when no one could contradict him. It was certainly hard upon Messer Marco, when, after all his

strange experiences, he returned home to do his duty as a Venetian citizen, that his first attempt to fight for his country should end so disastrously, but we cannot altogether regret his misfortunes, since we probably owe to his captivity the story of his adventures.

There was a certain writer from Pisa among Marco's fellow-prisoners, one Rusticiano, whose chief work hitherto had been the cutting down and re-arranging of stories from the French romance of King Arthur. In the long, dreary days, when the hours dragged heavily for the Venetian captives, we can fancy how gladly they would beguile the time by questioning the traveller about the strange countries he had visited. Marco, we know, was a quick and careful observer and an excellent storyteller. In the days when he lived at the Court of Cathay, he had heard the great Khan talk scornfully of the travellers who came home with nothing to tell, and when he, in his turn, became the monarch's envoy to neighbouring princes, he took care to note everything of interest to describe to his master on his return. And, now, indeed his tales must have been valuable, as his companions in misfortune gathered round him, thankful for anything that would take their thoughts for a little while from their gloomy surroundings. The prison walls would melt away, the disgrace and discomfort would be forgotten, as they followed Messer Marco into those mysterious, unknown lands. He could tell of the beautiful heights of the Himalayas, where the health-giving air had cured him when he lay long sick of fever; of the wondrous buildings of Pekin and Shantung; of the strange customs of the wild tribes; above all, of the generous, magnificent monarch, ruling in his splendid Eastern court, and full of interest in European affairs. He would never have parted with his three Venetian favourites save at the request sent by the envoys of the Khan of Persia to seek a bride for him from among the Mongols. The ambassadors begged that the Europeans might travel back with them in the train of the royal lady, so the beautiful seventeen-year old maiden, Cocachin, was entrusted by Kublai to their care. The journey was made by sea, and was attended with such dangers and hardships that most of the party perished on the way. At last, after more than two years, the one survivor of the Persian envoys, and the three indomitable Venetians, delivered their charge safely at the Court of the Khan, to find that Arghun, the monarch who had sent to woo her, was himself dead. His son, however, who had succeeded him, was quite ready to wed and console the young lady, who parted tearfully from the kind trio with whom she had shared such strange experiences.

It was no wonder that Rusticiano, the romancer, was seized with a desire to take down in writing these marvellous adventures, quite as interesting and attractive as the exploits of King Arthur's knights. So, during the months of captivity, from September till the next July, he wrote, at Marco Polo's dictation, in the French tongue in which he usually told his stories. It was not a connected tale; the traveller passed from city to city, from one journey to another, as the recollections came upon him, and we may notice the changes from the simple style of the

eye-witness to the 'tall-talk,' the fine words and flourishes which Rusticiano introduces here and there. There are descriptions of India; of Thibet and Japan, tales that remind us of the Arabian Nights, wild legends, certainly believed by the teller, for, in those days, all unexplainable things were accounted for by magic and miracle. It is a fascinating story still, making us feel half ashamed as we hear how these Venetian gentlemen, six hundred years ago, undertook and accomplished journeys which we, with all our modern appliances, still consider arduous and difficult. And it is very pleasant to think how much those travellers' tales must have helped to brighten the dreary days in that Genoese prison, where Rusticiano, the Pisan, earned our gratitude by saving for generations yet to come the recollections of Messer Marco of the Millions. MARY H. DEBENHAM.

INSECT LIFE IN ICELAND.

THE name of Iceland has a cold sound about it, and the country has a short summer and a long winter; yet it is a less dreary region than we might suppose. There is plenty of both animal and vegetable life to amuse or occupy those who are fond of natural history, though many objects are wanting which we find in temperate countries.

One of the peculiarities of Iceland is the hot and sulphurous springs, which make some parts of the land warm and the air dry. Sulphur is not agreeable to many insects, and yet it is curious that near some of the sulphurous springs, stout-bodied moths or noctuas are frequently plentiful, as at Geysir and Lang. Butterflies do not seem to dwell in Iceland; stray specimens have been taken of some kinds, which, it is thought, have travelled there on board ship, as butterflies do now and then. Some people have taken slim-bodied moths to be butterflies; there is a great abundance of one kind in particular, white, with a blue or greyish band across the wings. Most of the Iceland insects are brown or grey; only a very few have a touch of brighter colour, and many of them are so nearly like the lichen-covered boulders of lava, that they are scarcely noticed when resting upon them. Along the slopes of the hills, if the dwarf willows and birches are touched, the moths rise in clouds, and they are also abundant at dusk along the low-lying meadows. The flowers that are most attractive to them are those of the wild thyme. Bees are rare, as there is a scarcity of wild flowers, but some specimens are found. Flies, however, are plentiful, especially a yellow-winged species, and one with a dark body; they are attracted in swarms to dried fish.

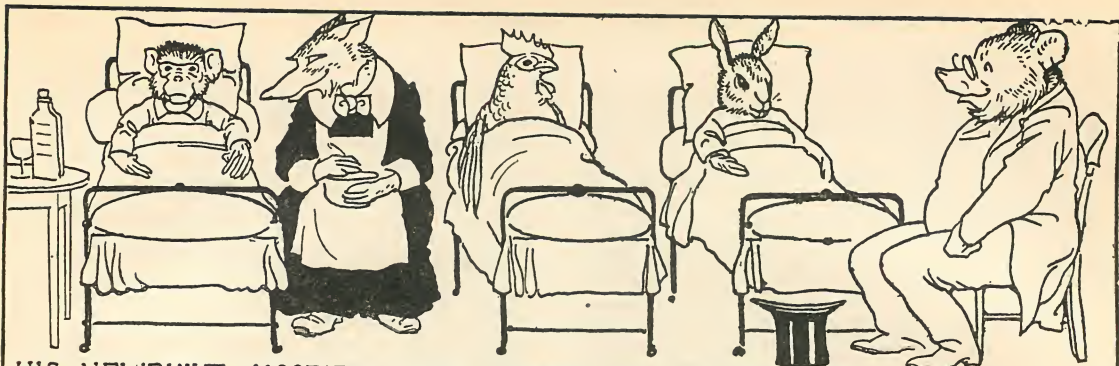
Along the plains, beetles may be discovered by turning over stones, and others by searching the grass and low herbage; they are generally dull-coloured. Occasionally a caddis-fly or water-moth is to be seen skimming over the surface of a small pool, in which the grub has made its curious case or movable house. Earwigs, so common in our islands, do not appear in Iceland; it is not sufficiently warm to suit them.

Travelling over the plains and fields in Iceland is fatiguing, the ground being sometimes rough, with

numerous jagged stones, and at other times slippery, because it is covered with a whitish-green moss, which hides treacherous holes. But the Icelanders are a simple-minded, active people, very sociable, and always ready to give a kindly welcome to strangers.

THE WILD BEASTS' HOSPITAL.

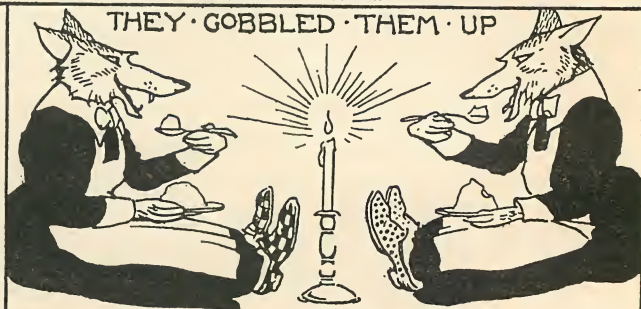
'I THINK a Wild Beasts' Hospital would be a splendid thing,' Said Dr. Bruin; 'I must try to start one in the Spring. I'll build it large, and charge the beasts according to their size; The nurses shall be well-trained wolves, the wisest of the wise.' When spring-time came the hospital was quickly in full swing; The wild beast came with ache and pain, the bird with broken wing. The doctor cured them speedily, and when his fame had spread, He found his new-built hospital had scarce an empty bed. And the nurses were so gentle, it was really quite a treat To see how tenderly they coaxed the invalids to eat; And no one heard them whisper to the patients, pale with fright, 'If you should dare to eat too much, we'd eat *you* in the night.' And poor old Dr. Bruin tried in vain to puzzle out Why the patients grew so bony and the nurses grew so stout. Till at last one night, by accident, he peeped inside their door, And saw the nurses sitting in a row upon the floor. Around them were the dainties that the patients dared not eat, The jellies, peaches, custards, and the grapes so round and sweet. And while they grabbed and gobbled them the doctor crept away, And, chuckling gently to himself, he planned a trick to play. The next day all the jellies were a fascinating red, And the nurses wished the time would come to have their nightly spread. The invalids were not allowed to smell or touch or taste, And yet no single tea-spoonful was thrown away as waste. At midnight all the nurses felt so dangerously ill, They summoned Dr. Bruin with his powder and his pill. He gave them nasty physic every hour, both night and day; They lived on gruel for a week and then they went away. And Dr. Bruin chuckled as he saw them to the train, 'I do not think they'll touch,' he said, 'their patients' food again.' The hospital was flourishing when last I heard some news; The patients lived on dainties and were nursed by kangaroos.



HIS · NEWBUILT · HOSPITAL · HAD · SCARCE · AN · EMPTY · BED ·



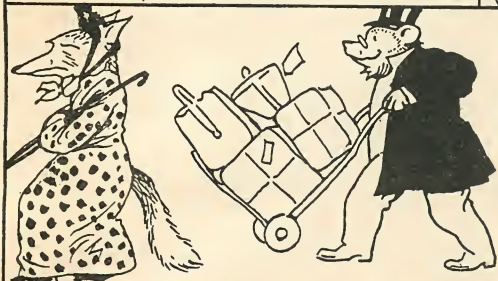
THE · PATIENTS · GREW · SO · BONY ·
THE · NURSES · GREW · SO · STOUT ·



THEY · GOBBLED · THEM · UP



· SO · · · · · ILL ·



· HE · SAW · THEM · TO · THE · TRAIN ·

NURSED · BY · KANGAROOS · கி.கி.கி



THE ·
WILD · BEASTS' ·
HOSPITAL ·





“‘You might have called it the “Ellen,”’ suggested Tony.”

THE ‘HENRIETTA ELLEN.’

THE new boat was made of yellow varnished wood. She had one square white sail and one little three-cornered one, which Punch called

‘the jib.’ He called the big one the ‘main-sail,’ and talked in a very important voice, to impress the little girls with his knowledge.

It was not often that the Penwicks were given

presents, so that the coming of the *Henrietta* was rather an event, and everybody was ready to go and sail her.

'Not until after dinner, though,' said Mother, firmly, 'and even then I do not see how *Henrietta* can go, as I am going to take her to Inglelea, to see Mrs. Craig, this afternoon, and the cab is coming punctually at two.'

'Oh, but, Mother, Hetty must come!' cried Punch. 'She's to launch the boat. I promised her.'

'Well, if you have promised, I suppose we must try to arrange something,' said Mother, smiling. 'I suppose I shall have to ask Angler to drive down to the lock on the way and pick Hetty up; but, mind, Hetty, you must keep yourself clean and tidy.'

'Oh, yes, Mother!' cried Hetty, rushing at her and hugging her, 'I will be careful—I will, truly! Oh, I am so glad you are going to take me with you. It is a treat!'

It was quite as uncommon an event to go a drive in the old 'fly,' that Mr. and Mrs. Fenwick sometimes hired from the village inn, as it was to have a present. 'You see, Punch, it has all arranged itself so very nicely,' she said, 'for of course I shall have on my very best clothes, and one ought to when one launches a boat.'

Punch laughed. He was busy writing '*Henrietta*' on the bows of the new ship. 'I wish that I had said I would call it the "*Lucy*" instead,' he said. "*Henrietta*" is such a horrible long name to write.'

'"*Lucy*" is only four letters,' said Lally.

'Or you might have called it the "*Ellen*," after Aunt Ellen,' suggested Tony, who was holding the inkpot.

Punch stopped short. 'I never thought of that!' he said. 'I hope Aunt Ellen won't think it very unpolite not to have her name.'

'Of course she won't,' said Hetty, quickly. 'Besides, I think the "*Henrietta*" sounds so much better than the "*Ellen*."'

'Suppose she was called the "*Henrietta Ellen*?"' said Tony.

'Well, that might do,' agreed Punch; 'but it will have to be the "*Henrietta*" on one side and the "*Ellen*" on the other; for, as it is, I have to put the last "*ta*" underneath, because there is no room.'

'But—but—Aunt Ellen will have to launch her, then!' said Hetty, getting very red. 'She is the oldest of us two.'

'What is that I shall have to do?' asked Aunt Ellen, who had just come into the room.

'Why, Punch is going to call his ship the *Henrietta Ellen*,' explained Tony, 'and Hetty is afraid that you will have to launch her, because you are the oldest; but you won't mind her doing it, will you, because she was to have done it before Punch remembered you?'

Aunt Ellen folded her hands and looked at the children from her bushy eyebrows. She saw Tony looking very anxious, Punch very red, and Hetty shocked.

'I have never launched a ship yet,' she said; 'and at my age I do not suppose I ever shall. Thank you very much, Frank, for doing me the honour of asking me; but I shall require a little rest after luncheon, and then, no doubt, it will be time for me to dress to go with your mother; so I think that *Henrietta*

had better undertake the task of launching the boat, if you will please excuse me.'

'Ah, that's all right!' said Tony, heaving a sigh of relief; but when Aunt Ellen had gone out of the room both Hetty and Punch turned on him. 'Tony, you shouldn't have said that I had forgotten all about her name until afterwards!' said Punch. 'She will think me ungrateful!'

'Tony, you shouldn't have asked her to give up launching the ship for me. It was very rude!' said Hetty.

'Well, but—but——' stammered Tony.

'Look out what you're doing, you duffer—you are spilling the ink!' shouted Punch.

Tony righted the inkpot, and his face was very red. 'But you *did* forget, Punch; and I don't think that Aunt Ellen thought me rude, Hetty!' said he.

'Well, it can't be helped now, I suppose,' said Hetty; but I do wish you wouldn't always be making muddles of things, Tony.'

Punch laughed, teasingly. 'Tony has made a muddle of it getting you to launch my boat, after all, hasn't he?' he said.

'There is only four letters in "*Lucy*" said Lally once more.

'You shut up,' said Punch. 'Clear out everybody, here is Alice come to lay dinner. Look, Alice, Tony has upset the ink!'

'Gracious goodness!' said Alice. 'Tony, you naughty boy!'

'I—I didn't mean to!' said Tony. 'It was quite an accident, truly!'

'Then it's an accident that ought never to have happened,' said Alice, severely, and she went off to the kitchen for a damp cloth.

'I think I had better go up to the nursery and ask Sally to wash my hands,' said Tony, with dignity; 'they have got all inky with holding the inkpot for you, Punch!' and he began to walk away, but Punch ran after him, and slipped his arm round his brother. 'I am coming up to wash my hands, too,' he said; 'they are dirty. Look!'

'Oh, all right,' said Tony, beaming, 'and I will lend you my pumice-stone. It is the most delicious scratchy sort of soap!'—So peace was restored.

(Concluded on page 70.)

LETTERS FOR THE ARCTIC CIRCLE.

AS those who go in search of new homes in new countries spread farther and farther afield, it is necessary that the postman should follow them—or how are they to get their letters?

Some years ago the Government of Canada did not undertake to deliver any communications to an address farther north than Edmonton in Alberta, however well stamped the envelope might be. But it is different now, and an Arctic mail goes north by stages with letters to be distributed in sight of the Arctic Ocean, the last bag being handed over to a dog-train, which slips over the frozen land at a merry speed, carrying messages of love and good wishes to many a lonely home.

Will the time ever come for the postman's knock to break the silence which has lingered for so long round the North Pole itself?

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 53.)

THE ship had at last unbuoyed, and was stemming the up-coming tide, making four or five knots. Factories and houses were slipping by on either bank, steam-tugs darting about, and long lines of barges—nearly every barge with a dog on the deck and a man smoking a pipe—were coming up with the water. It was a bright and moving picture under the warm afternoon sky, and Marley, with a catching of breath, felt that he had embarked on a new life indeed, a life very different from the humdrum life at Meersham.

'I say,' he said at last, 'you didn't see anything of those Spaniards you heard talking together at the Hippodrome last night, did you?'

'Not a speck,' said Teddy. 'I may have been mistaken, but I'm not often mistaken, though it's myself that says it, and, of course, there might be some other craft with the same name as ours. I looked closely at all the crew as they came on board; there wasn't a sign of 'em. You see, those chaps at the theatre were gentlemen. Bother! here's that beast Diego, he's assistant electrician; I thought he wasn't coming this trip, but he is.'

A fat, swarthy young man, with a cigarette in his mouth, strolled up.

'Well, Mr. O'Byrne——' he began.

'O'Brien's my name,' said Teddy.

'Ah! yes—O'Brine; and how are we this morning?'

'I'm not plural,' said Teddy, 'and it's afternoon; but I'm singularly well, thank you, and how's yourself?'

Diego didn't seem to relish this form of conversation much, and, after a few more words, lounged aft to get a light for his cigarette.

'I hate him,' said Teddy, 'and he hates me. I gave him a hiding once; the brute kicked Sloper. I don't say old Sloper doesn't deserve being kicked round the main-deck every day, but Diego is not going to do it. Notice the way he pretended to muddle my name? That's one of his ways—always sneering; and, mark you this, Dick, a person who is always sneering is a right-down bad lot.'

The *Kingfisher* had made great way down-stream by three o'clock, when the engines ceased working, and the ship came to off Tilbury.

'I say,' said Marley, 'we're stopping.'

'Of course we are,' said Teddy; 'this is Tilbury; we stop here to swing the compasses. Lilly, the mathematical instrument chap, will be aboard in a jiffy. Hi, what's that?'

A banana-skin had hit him on the head. He looked up. Sloper was on the ratlines above, and Sloper was devouring the remains of a banana.

CHAPTER VIII.—THE FIRST SIGN.

SEA-SICKNESS has only one language, and that language has only one word, and that word is 'Oh!'

Dick Marley was talking this dreadful language at intervals as he lay in the bunk beneath Teddy's in their little cabin. They had passed the Nore, they

had passed the Forelands, and were out in the green choppy Channel. On the second evening at dusk, Teddy came down to the cabin.

'How are you getting along, Dick?' said he, poking his head in.

'Oh!' said Marley.

'Tumble out and come up on deck and have a sniff of the sea,' said Teddy. 'I know how you feel: you're like the Frenchman who said the first day he was at sea he was afraid he'd die, and the second day he was afraid he wouldn't.'

'Oh! *don't* talk to me,' said the unfortunate Dick. 'I don't want to die; but I want to get ashore—anywhere out of this.'

'Just so, and we'll have you out of it in a minute,' said Teddy, catching him by the leg; 'you can't be sicker than you are, and *that's* a comfort, as the dose of ipecacuanha said to the gentleman who had swallowed it. *Up* you get—no tomfooling now; cling to me tight, as the old lady said to the 'bus conductor when the horses bolted—mind that stanchion; this is the way, here's the stairs, cling to the rail. Why, you're twice the man you were a minute ago. Smell *that*.'

Marley found himself on deck clinging to the mizzen ratlines, a strong breeze blowing in his face and a world of tossing sea before him. The breeze felt delicious after the stuffy air of the cabin.

'Why, I believe—I feel better,' he said.

'I told you so,' said Teddy. 'See those lights, they are Ushant lights; we are just turning the corner and entering the Bay.'

Then Teddy led his unfortunate friend to the tarpaulin-covered hatch of the after cable-tank and made him sit down.

Mr. Toms was pacing the deck before them and smoking a cigar. Presently he came and sat down beside them.

'Well, and how's the sea-sickness?' he asked.

'Better, thank you, sir,' replied Marley. 'This breeze has pulled me up.'

'I pulled him up,' said Teddy, 'and he sticks it down to the breeze. That's the world all over.'

Up came Mr. McGrath with a pipe in his mouth. 'Well, my laddie, how's the sea-sickness?' said he. Then, without waiting for a reply, and addressing Mr. Toms, 'I've noticed one thing about this voyage. I'm not a superstitious man myself, but we sailed on a Friday, and on the thirteenth of the month.'

'Ay, ay, so we did,' said Mr. Toms; 'and that reminds me of a story——'

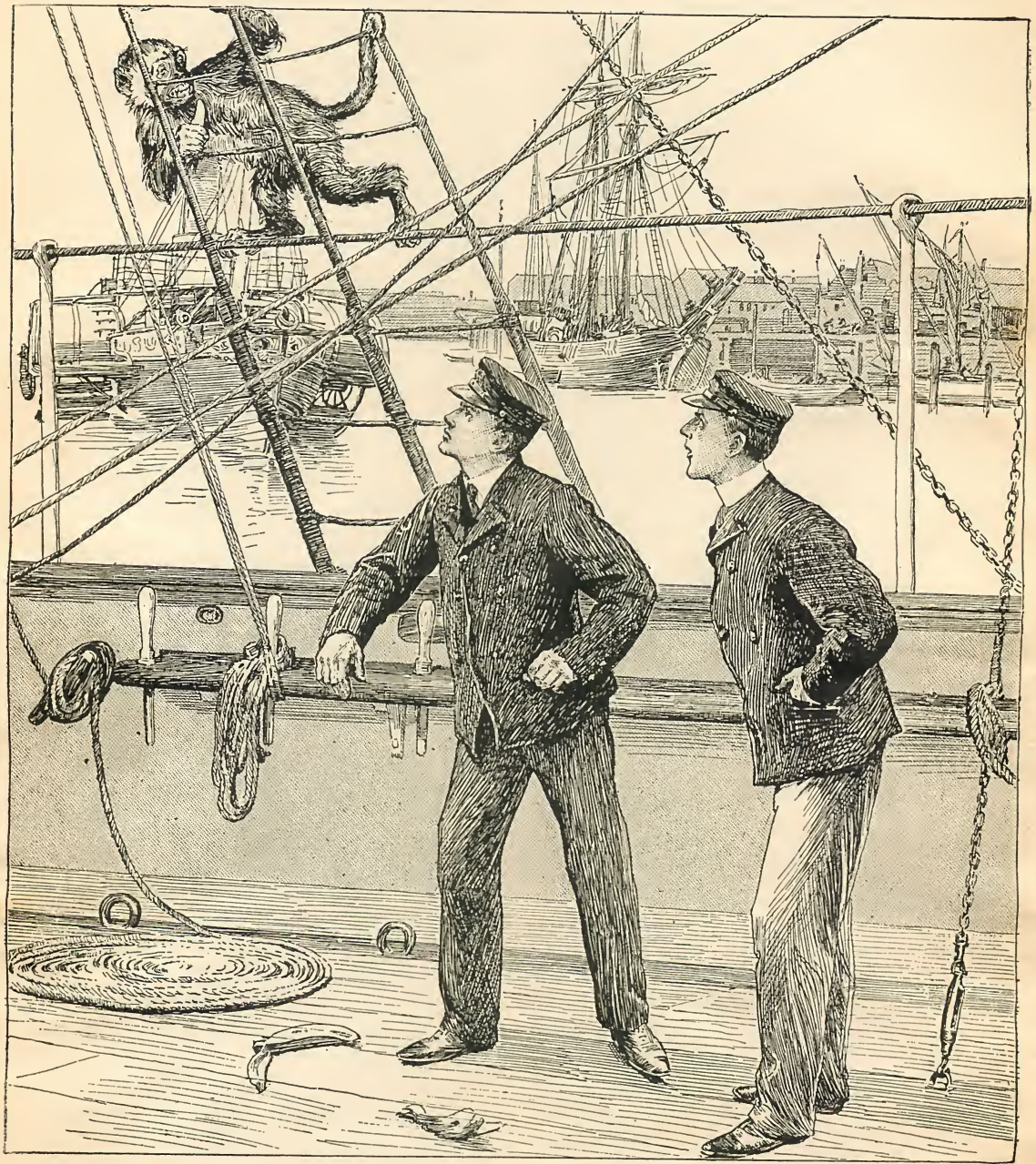
'I'm off to the engine-room,' said Mr. McGrath, whose Scotch common sense could not stand Mr. Toms' stories. 'McRimmon, the second engineer they've given me, canna distinguish a hot bearing from a cold ice-cream, and wants looking after.'

'Do you believe in superstition, Mr. Toms?' asked Teddy, as McGrath's burly form vanished down the engine-room stairs.

'Not exactly, Teddy,' replied Mr. Toms. 'On shore it's different, somehow. I don't know why, but it is.'

'I've heard people say, sir,' put in Teddy, 'that you know more about the bottom of the sea than any one else in the world.'

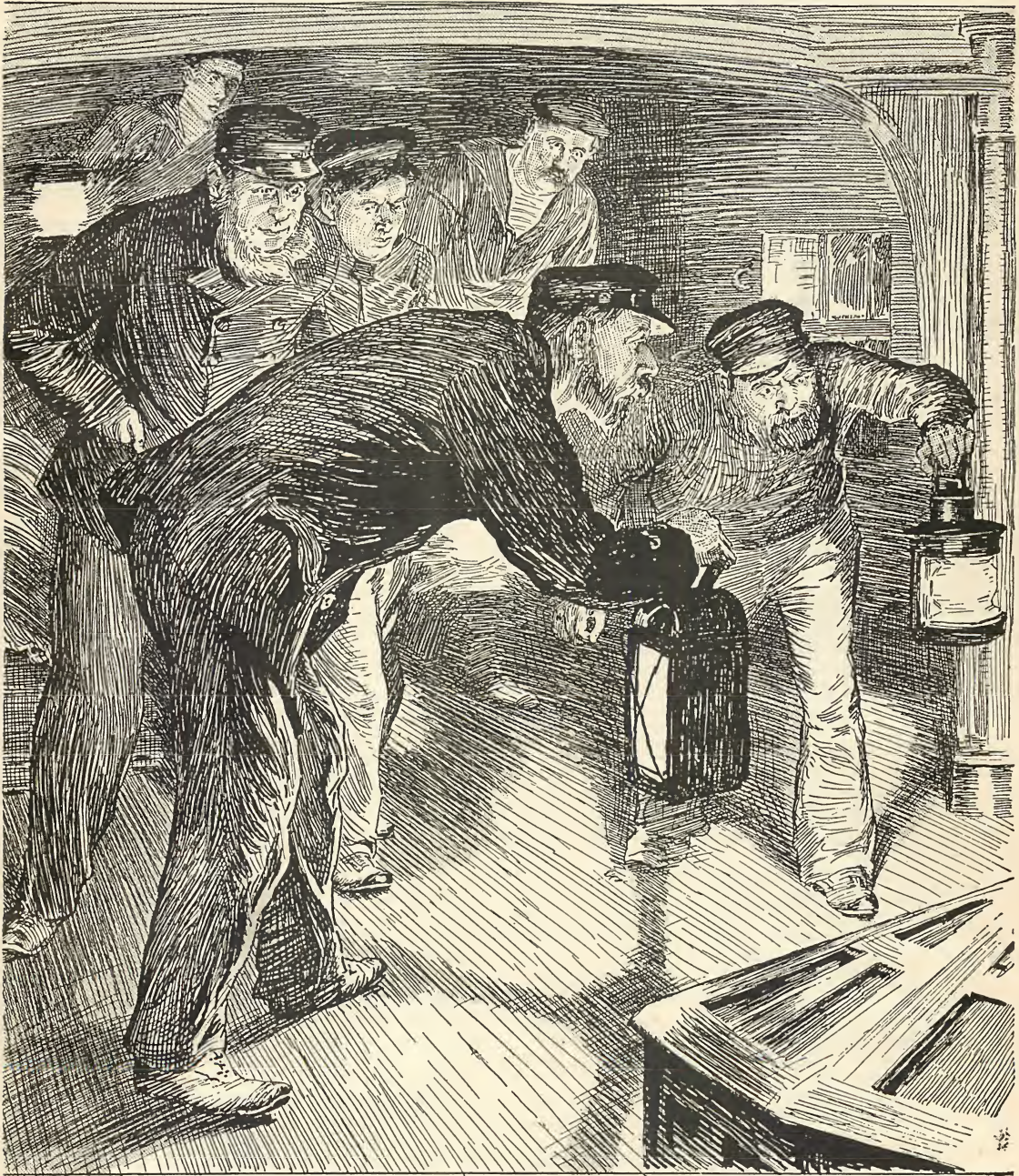
(Continued on page 66.)



"A banana-skin had hit him on the head."



COCK-FIGHTING.



"A tour of the decks was made with lanterns."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 63.)

'YOU have heard about right,' said Mr. Toms in answer to Teddy's question. 'I've been a cable-engineer now thirty years, and a cable-engineer *has* to know the bottom of the sea as well as if he had walked over it—ay, and better. Now, suppose you are laying a cable from here to America, the job would be an easy one enough if the bottom of the sea was all flat like a plain. You'd just steam along and pay your cable out behind at the same rate all the time. But it's not flat; you cross ranges of under-water mountains higher than the Alps, you cross submarine valleys deeper than any valleys on the land, and you have to pay your cable out accordingly. Going over a mountain range you have to pay out cable maybe five times as fast, and the same over a very deep valley. Did you ever see a valley or a hole in the land four miles deep? Well, there are holes in the bottom of the sea and valleys *five* miles deep, measuring from the surface. Then you have sometimes two ranges of mountains lying side by side, with a valley between. If you don't look out your cable will be stretched like a clothes-line between the tops of the two mountain ranges, and it will snap of its own weight, or the first big fish, like a whale, swimming between those mountains will do the business.'

The idea of whales swimming between mountains seemed so strange to Marley that he thought Mr. Toms must be indulging in his usual fanciful talk, but he was not. Mr. Toms never made jokes about the sea-depths and the floor of that wonderful land which is hidden from us by water. It was his business to know it; he knew it better than most other men in the service, and he was very proud of his knowledge.

'What is the greatest depth of the ocean, sir?' Teddy asked.

'The Tuscarera Deep off the coast of Japan, over five miles deep sharp down. If you were to drain the water off, you'd have a cliff five miles high—not a comfortable cliff to tumble over.'

'I can't even imagine it,' said Teddy.

'No, nor any one else.'

'How do you know that there are mountains at the bottom of the sea, sir?' asked Marley, who had almost forgotten his sea-sickness in the fresh air on deck.

'By taking soundings. If you find a sounding of two hundred fathoms here, say, and a little farther on a sounding of two thousand fathoms, you know you have passed over a mountain one thousand eight hundred fathoms high.'

'Are all those yarns true about monsters and sea-serpents that live so deep down that they seldom come to the surface?' asked O'Brien.

'I'll tell you that when I have been there to see,' replied Mr. Toms, rising and flinging the stump of his cigar overboard. 'Good night.'

'Good night, sir.'

Ten o'clock—four bells sounded from the bell forward, followed by the far shrill call from the look-out man at the bow, and the two boys went down to

their cabin. It was situated in what was known as the 'square'—a square space surrounding the after-cable tank, with several cabins opening out of it.

'I feel a jolly lot better,' said Marley, as he crept into the lower bunk. 'That awful— Oh, good gracious, if I think about it, it will come back!'

'Don't think about it,' replied Teddy, in a drowsy voice. 'Think you're at the bottom of the sea, crawling over mountains three thousand miles high, chased by mermaids—three thousand—oh, yes—um—'

Snort! He was asleep.

How long Marley had been asleep he did not know, when he was awakened by a brilliant light. The electric lamp in the cabin had been switched on, and the voice of the quartermaster was crying, 'All officers of the ship on deck! Man overboard!'

In another second he was out of his bunk and in his pyjamas, covered with an overcoat, following Teddy. The great arc lamps used for cable-work were lit, flooding the forward part of the ship with light. The bo'sun's pipe was shrilling, calling all hands on deck. Cable-hands, foremast-men, stokers off duty, all were tumbling up; every one, in fact, but the engine-room staff on watch, the quartermaster at the wheel, the officer of the watch, and the look-out man at the bows.

Stevens, one of the quartermasters, whose trick at the wheel began at eight bells (midnight), had not turned up. Now, at sea a man scarcely ever fails to turn up at the appointed moment, especially the man who has to take the wheel. A hand had been sent to fetch him—his bunk was empty!

The ship was still on her course. To see the futility of stopping her one only had to look over the side at the world of tumbling water, black and silver under the faint light of the half-moon. Even if he had fallen overboard only five minutes before, the ship was making such way that it would be impossible to find him in that tumbling welter of sea, and it might have been an hour ago that he disappeared, or more.

For formality's sake the roll was called, and every one accounted for but Stevens. Then a tour of the decks was made with lanterns. Teddy was walking close to Captain Spratt when the lantern-light flashed on a dark handkerchief lying on the white deck near the after-gratings. He stooped to pick it up, then he gave a shout of dismay. It was a handkerchief stained with blood. There were also marks of a struggle near the railings, which were bent and dented. Stevens had been murdered and hove overboard, of that there could be no manner of doubt.

Every one who has been to sea will understand the commotion such an occurrence must occasion. A ship is like a village—a floating village, where every one knows every one else, and where every one meets and sees every one else every day. A single disappearance means a terrible mystery.

The hands were called together again and all knives ordered to be produced. Nearly every foremast hand wore a sheath-knife at his belt: all these were examined, but nothing noticeable was found. Then the hands were dismissed. There was nothing

more to be done till morning, and the ship continued her way through the darkness of the night.
'Dick,' said Teddy, half an hour after they had returned to their bunks.

'Hullo!'

'I can't sleep, can you?'

'Not a wink; the idea of that——'

'Ugh!' replied Teddy, and then there was silence in the cabin as the two boys lay thinking of the dead sailor.

'It was one of those foreign seamen,' said Teddy at last. 'I feel sure of it; no Englishman would have done such a thing—and when I think of it I can't help remembering those chaps at the Hippodrome, and what they said.'

'I was thinking of that, too.'

'The only thing I can't imagine,' said Teddy, 'is the reason of it. If there were valuables on board the ship there would be some sense in turning us overboard and taking possession; but an old cable-ship, with nothing valuable in her except cable——'

'Perhaps they want to take the cable and sell it.'

'Rubbish! You might as well take St. Paul's Cathedral and try and sell it. Who's going to buy a thousand miles of cable—who's fool enough to try and sell it? They would be found out at once. Besides, we haven't more than five hundred miles of it on board, for this is a repairing job, not a laying one.'

'Remember,' said Dick, 'if they wanted to take the ship, what's the good of getting rid of one man like that?'

'Oh, that's different! You see, Stevens and two others are the only Englishmen amongst the actual crew. I can imagine, if they wanted to rush the ship, they'd like to get rid of the Englishmen amongst themselves first.'

'Teddy!'

'What?'

'Would it be a good thing to tell the captain what you heard at the Hippodrome?'

'I was thinking about it; but you don't know the old man, he pishes and pshaws every one's opinion but his own; besides, he is down on me—says I'm irresponsible.'

'Same as my father did.'

'Yes,' replied Teddy; 'and it turned out I wasn't so irresponsible after all. Now close your eyes and go to sleep.'

(Continued on page 78.)

MY ROSE.

I KNOW a rose in a corner,
It blooms where the shadows lie,
And just beyond
Through a cedar frond
Is a narrow glimpse of sky.

I know a rose in the sunshine
With never a shade of gloom;
By the velvet grass
Where we often pass,
It tosses its crimson bloom.

I have heard the rose in the sunshine
With the vainest of accents cry:

'Oh, I know, I know
I could never grow
Where the dull cold shadows lie.

'I want to be often looked at,
To listen to words of praise;
But hidden there
I should never share
The joys of the garden days.'

But the rose in the lonely corner
Smiles on with a kindly grace,
And, ever content,
Has gladly lent
Its light to the shady place.

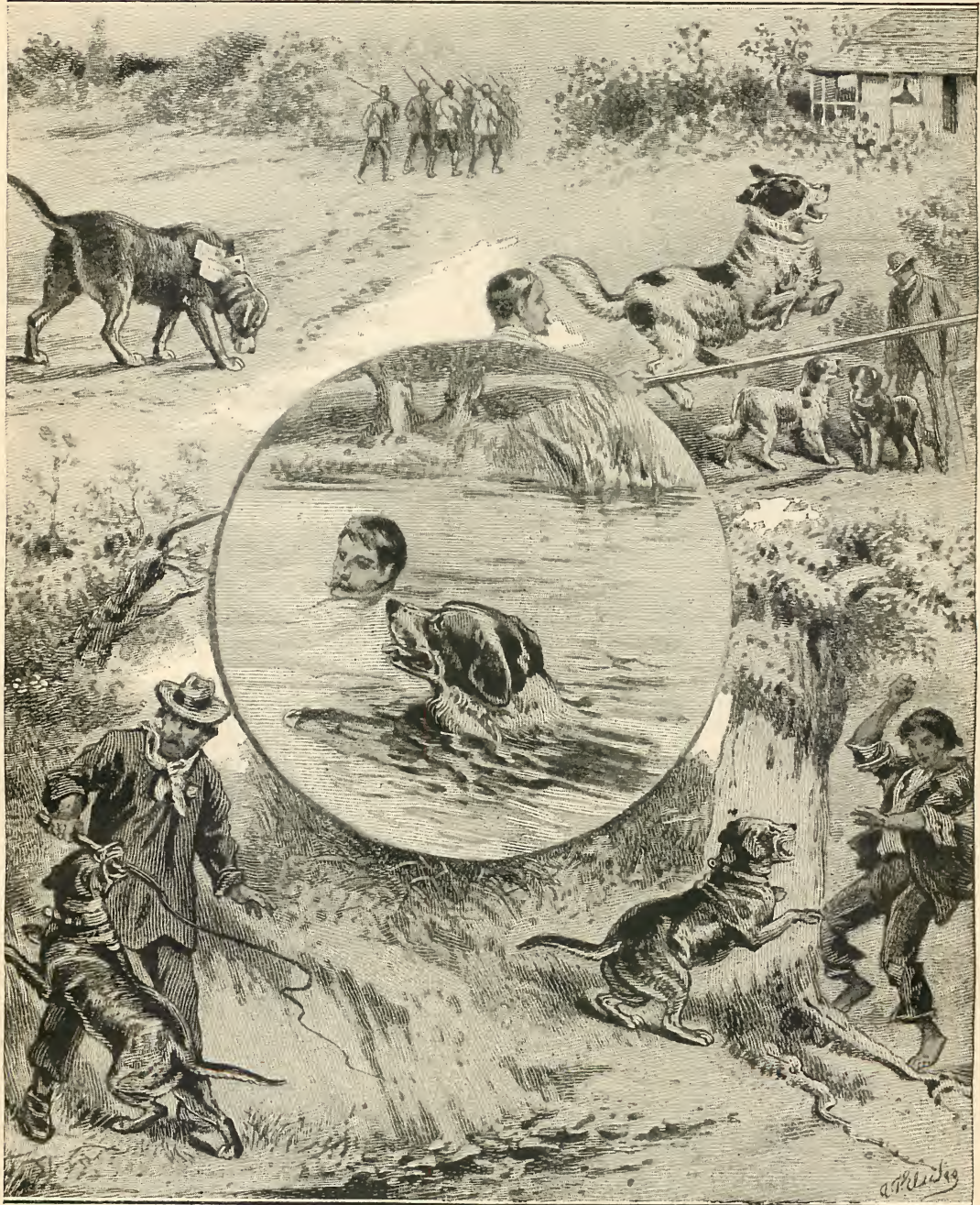
AN EXAMINATION FOR DOGS.

IN one of the large public gardens of Vienna not long ago an examination was held at which all the candidates were dogs. They were divided into three classes, and examined as to their merits in the branches for which they had been trained. First of all came the 'soldier' dogs, who were expected to be able to jump over obstacles, to swim rapidly, and to carry messages. Most of the animals entered for this section showed great skill in jumping and climbing, and were very successful in tracking a column of soldiers, following the scent of their footsteps, and delivering letters that had been tied to their collars.

The second class consisted of 'police' dogs. Many of them came from Germany, where they are frequently used as assistants by the police. One dog called 'Siegfried' did his duty with such zeal that it caused some trouble. He was ordered to find a man supposed to belong to a band of thieves, and to identify him by his clothes. Siegfried soon found the man, a city messenger, dressed in rags, so as to look like a burglar; but he was so delighted at discovering the man behind a tree that he thought he might undertake his punishment as well, and flew at him with open jaws, frightening the poor messenger so much that he refused to undertake the part of 'thief' any longer, and left the gardens. Another man was obliged to take his place, and allowed himself to be marched off to prison by the over-zealous Siegfried.

One of the champion jumpers sprang over a man's head, and climbed up a fence; another named 'Lux' had a fight with a 'robber' who tried to drive him away with a whip. The dog showed great skill in seizing the weapon with his teeth, and thus disarming his enemy. He then gave an exhibition of his talent for finding objects that had been lost, and restoring them to their rightful owners, whom he recognized by the scent.

The third class was composed of 'ambulance' dogs, who were required to rescue men who had fallen into the water. A first-rate swimmer undertook to be a 'drowning man,' but his cries for help did not convince the dogs that he was in danger. The first one simply stood on the bank and barked to call attention to the fact that there was a man in the water; another dog attempted to rescue him, but, finding that he could swim alone, did not give him-



Soldier Dogs, Police Dogs, and Ambulance Dogs.

self any further trouble, and just accompanied him to the side.

As a result of the examination, it was decided that dogs are most useful as 'soldiers' and 'police-

men,' and especially in tracking thieves and others by the scent; but it was seen that they cannot always be depended upon to act with good sense in situations of gravity.



I.



II.



III.

PICTURE PUZZLES.

(See page 69.)

I.

SIMPLE SIMON met a pieman
 Going to the fair;
 Says Simple Simon to the pieman,
 'Let me taste your ware.'
Find the Pieman.

II.

The Queen of Hearts
 She made some tarts,
 All on a summer's day.
 The Knave of Hearts
 He stole those tarts,
 And took them clean away.
Find the Knave of Hearts.

III.

Baby, Baby Bunting;
 Father's gone a-hunting!
Find Baby Bunting.

THE IMPORTANCE OF LITTLE THINGS.

A BUTTON-MAKER of Birmingham had occasion to visit London to give evidence respecting beads and buttons before a Committee of the House of Commons. Whilst he was there, a man called upon him, and asked him if he could make him a number of dolls' eyes. The button-maker felt almost offended at such a seemingly trivial request, but before he declined it, he thought he would learn a little more clearly what was wanted. So he went with the doll-maker to his works, and there he was shown into a large room, where there was only just space to walk between piles of dolls which reached from the floor to the ceiling. They were not whole dolls, however, but only the legs and arms. The bodies, as the doll-maker told him, were in another room below. The button-maker saw at once that a great many dolls' eyes would be required for such a great number of dolls, and as he thought that he could make them, he agreed to take an order, and try what he could do. The doll-maker gave him a list of the various kinds and sizes which he required, and when the button-manufacturer returned to his hotel and had leisure to reckon up what the cost of them would be, he found that he had received an order for more than five hundred pounds'-worth of dolls' eyes.

THE 'HENRIETTA ELLEN.'

(Concluded from page 62.)

DIRECTLY after dinner a very happy little party started down the village. Punch carried the *Henrietta Ellen*, and beside him walked Hetty, in her very best white-worked frock, and a shady white hat, with a pale-blue sash round her waist, the neatest of stockings on her legs, and her curls

brushed until there was hardly a hair out of place. She felt very happy and very nice. Her gloves were in her pocket, that was the only drawback to her perfect enjoyment; but Mother had said she would be sure to get them wet when she launched the *Henrietta Ellen*, and so she must not put them on until the ceremony was over. Lally and Tony were in the wildest of spirits.

'Be very careful, all of you,' said Mother, as they started off.

'Yes, we will!' they answered.

The canal was always an anxiety to Mother, she was so afraid that the children would fall in; but Father said, 'Let them take care of themselves. Children are more careful than one thinks. Let them learn by experience.' So the children were allowed to play as much as they liked by the canal, and, as they liked it very much, they were very often there.

Mother had one consolation. There was a lock-house down by the canal, and a wharf, so that there was always sure to be some one about, who could run to the rescue, if it were necessary.

The canal was a lovely place. There were shady trees along the towing-path, and here and there a bridge, and the water was so clear that there were reflections in it of the trees above and of the rushes on the banks, and even of the blue sky and the clouds above.

'I think that we could launch the ship best on the other side of the canal,' said Punch, when they had reached the wharf.

Punch always liked to cross the water-gate across the canal. It was in two parts, with only a narrow little ledge to walk on on one side of the gate, and the ledge was worn into a hole by the water, and by the continual opening and shutting of the gates by the bargemen when the barges went through. Nobody (except Lally) liked to say that they were afraid of crossing, though everybody was; for the water found little chinks in the woodwork of the gates, and made a great rushing sound as it forced its way through, and though it very nearly touched the little ledge on the one side, on the other there was a deep drop into the lock, where the water lay far, far below: and the sides of the lock were dark and clammy. There was another gate at the far end, but that was always open until a barge was in the lock.

'It isn't so deep on this side of the lock, Punch: wouldn't it be easier to launch the boat here?' said Hetty.

'No,' answered Punch; 'she will launch much better in deep water. I believe you are in a funk!'

'No, I'm not!' said Hetty, quickly.

'Come on, then,' said Punch, and he swung his leg over the little hole on the narrow ledge, and began to go very carefully over the lock gates. But at this sight Lally began at once to skip about and to scream. It was wonderful how quickly her face could pucker up and become scarlet all over.

'Oh, oh!' she cried, 'Punch, you mustn't; you will be drowned. Oh, oh, oh!'

'Oh, stupid!' said Punch, crossly; but the water was making even more noise through the chinks of the gates than Lally was making through her mouth, and really he was just a little glad to scramble back

again. 'You silly little thing, you spoil everything,' he said.

But Lally did not mind him being cross so long as he did not insist upon them all crossing the bridge, and so she stopped crying at once, and only looked indignantly at Punch. 'You naughty boy!' she said.

Tony heaved a sigh of relief; he did so hate crossing the lock gates; but now all was going to be right. He felt in his pocket, and pulled out an old scent-bottle of Mother's, which Punch had filled with water that he had coloured pink out of Tony's paint-box, and which was to be broken on the launching of the *Henrietta Ellen*.

Meanwhile Punch moored the *Henrietta Ellen* to the bank, and then he took out his knife. 'When I say "now" you must break the bottle on her bows, Hetty, and then I will cut the string and she will go off,' he said.

'No, you must introduce me first, and I must make a speech,' said Hetty. 'I'm sure they never say "now" when it is real!'

'Oh, very well,' agreed Punch, and then he turned to Lally and Tony. 'You are the crowd,' he said, 'and you must shout "hurrah" when the ship is launched, and give three cheers for "Lady Henrietta Fenwick" when I introduce her.' Then he began: 'My friends, I hope that you will welcome Lady Henrietta Fenwick, who has been kind enough to come here this afternoon and launch the ship *Henrietta Ellen*, and I hope you will show your appreciation by according her a very hearty welcome. (Now you must cheer three times.)'

'Hurrah! hurrah! hurrah!' said Lally and Tony.

Then Hetty stepped out on to a stone in the water close to the little boat that was pulling at her string, with both her pretty little white sails flapping merrily in the wind.

'Sir, ladies and gentlemen,' she began, 'it gives me great pleasure to come here to-day and to launch the *Henrietta Ellen*. I hope she will always go on as she has begun, and I have great pleasure in declaring—(give me the bottle, Tony, you stupid!)—I have great pleasure—(mind, you silly, you'll tip the stone up. Thanks, now you may go back)—I have great pleasure in naming this ship the *Henrietta Ellen*!'

Then Hetty bent quickly forward and broke the bottle with a crash just as Punch cut the string that moored the boat to the bank, and the crowd cheered with all their might and main.

It was very exciting indeed, and all had gone so well that it seemed a great pity that the next thing happened. Just as Hetty broke the bottle and Punch cut the string and the crowd cheered, the stone tipped up, and next moment there was a tremendous splash in the water, and the poor little *Henrietta Ellen* went down, down into the water with a kicking white thing on the very top of her!

I will not try to describe what a noise there was then, for when you hear that both Lally and Tony roared at the very top of their voices, and that Hetty roared and bubbled and kicked in the water, you will be able to judge for yourself what a disturbance there was! It brought the woman from the lock-house and two men from the wharf; but

by the time they got to the children, Punch had pulled Hetty out of the canal by her arms. He was so frightened that he went on pulling long after she was out of the water, and only stopped when he could pull no longer. 'Hetty, I've saved you!' he said, panting.

Hetty scrambled up on to her feet, sobbing bitterly. 'You have made me dirty all over, and now I cannot go with Mother!' she wailed, looking at her pretty white frock, which was drenched through and through, and muddied up to the waist; and just at that moment Mother and old Aunt Ellen drove up in the fly, and Mother put her head out of the window. 'Are you ready now, Hetty?' she called; and then she saw Hetty standing dripping from head to foot, and sobbing as if her heart would break.

In a moment Mother jumped out of the fly. 'Oh, what is it?' she cried. 'Hetty, is everybody else safe? Oh, dear, dear! How *did* it happen?'

'Why, she fell in sailing that boat, Ma'am,' said the lock-house woman. 'She wasn't in the water above a minute, for Master Punch had her out as fast as you please.'

'She's scared,' said one of the two men; then, with a grin, he and his mate went back to their work at the coal wharf.

'Shall I take the little lady in and dry her a bit?' said the woman.

But Hetty burst out crying louder still. 'Oh, Mother, *don't* let me be undressed in there—*do* let me go home,' she begged; and so Mother said she could go home if she went at once, and promised to run as fast as she could, so that she should not take a chill. Then Mother got into the fly again with Aunt Ellen, and they drove off, with Angler on the box, looking back over his shoulder and grinning until he was out of sight.

Poor Hetty felt dreadful. All her clothes stuck to her, her pretty blue sash was spoilt, and her hat fell about her face and dripped water down her cheeks in company with her tears.

'Come on, Hetty, I will run with you,' said Tony, slipping his hand coaxingly into hers.

'How can I run when my clothes hold me so tightly?' wailed Hetty. 'Oh, Hetty, it felt just like falling into cold cotton-wool. I can't bear all the horrid village people staring at me!'

'We will run hard. We shall soon get home. I dare say they will think I am all wet too,' said Tony cheerfully, and he pulled gently and firmly at Hetty's hand, and at last she began to run as fast as ever she could. Pretty soon it was she who dragged Tony along; but though he was quite out of breath and dreadfully hot, he did not say anything; and so they both disappeared up the village and round the corner.

Then Punch rescued the *Henrietta Ellen*, Lally standing near, quite interested now. 'She's wet,' she said: 'her sails are all wet!'

'I know,' said Punch. 'Poor little thing! I wonder that great Hetty did not smash her all to bits. She never even gave her a single thought, kicking about like that; and, of course, she broke the bottle on the stern instead of the bows—so like a *girl*!'

Lally gave a little laugh. 'Wasn't it a pity you did not call your ship the *Lucy*?' she said.



"Punch pulled Hetty out by her arms."



Don Baltazar Carlos of Spain.

PICTURES AND THEIR PAINTERS.

From the Wallace Collection, London.

III.—VELAZQUEZ.

WE have made acquaintance with the painter of soldiers and strolling singers, and with the courtly English gentleman who welcomed the rank and fashion of London to his studio, and now we find ourselves in the company of royalty, in the most ceremonious Court in Europe.

Diego Rodriguez de Silvaz Velazquez—a real mouthful of a name, with the Spanish stateliness in all its rolling syllables—was born at Seville, in the year 1599. He studied painting under two very different masters: Herrera, who was of so passionate a temper that his pupil went in terror of having his head broken, and Pacheca, who helped the young man in every possible way, and finally married him to his own daughter.

The turning-point in the painter's career came in 1623, when he was introduced to the powerful minister, Olivarez, who, in his turn, presented him to the reigning king, Philip IV. At four-and-twenty Velazquez found himself appointed Court painter with a residence in Madrid and a regular salary, in addition to the sum paid him for each picture. It must have been a strange and, in some respects, a narrow life, bound by the rigid rules of Court etiquette and without very much change or variety; but it gave Velazquez the opportunity of such portrait-painting as he loved, studying the same face again and again under every different aspect, until he knew not only the features, but the very heart and mind of his sitter.

He did, indeed, pay two visits to Italy; on the first occasion he spent much of his time in copying and studying the works of the great masters, and he seems to have looked back longingly to the days spent in Rome, and to have welcomed with delight the chance of a second visit twenty years later, to choose and purchase some works of art for the gallery of his royal master. He had made the acquaintance of Rubens when the Flemish painter visited Madrid on a political mission; but the Spaniard's work is utterly unlike either the Flemish or the Italian school. He painted with absolute fidelity the little world in which his life was spent, and if we would know the Court of King Philip IV., we shall find it portrayed for us by the brush of the man whose motto was *Verdad no pintura*—'Truth, not painting.'

But as we look at our illustration, we are reminded that even in that stiff and stately Court little feet trotted to and fro, and baby laughter awoke the echoes of hall and gallery.

One of the great master's most famous pictures is that known as *Las Meninas*, or the 'Maids of Honour,' where the little princess, Margarita, summoned to amuse her royal father while he sat for his portrait, asks for a glass of water, which is punctiliously handed to her on-bended knee by her lady-in-waiting. And of all his sitters there was none whom Velazquez knew better than the child whose portrait we have before us, the little Don Baltazar Carlos, weighed down, poor little fellow, by

his magnificent array, with his tiny sword by his side and his baton in his hand, taking his first toddling steps like any other baby. How often and how lovingly the Court painter must have studied the features of that little prince during his short life of sixteen years! Carlos the Infante, the darling of his grave father and the hope of Spain, must have been a happy little boy, in spite of gold-embroidered petticoats and rigid Court etiquette. Velazquez has left him for us galloping joyously past on his pony, and standing, a gallant little six-year-old hunter, among the great dogs, who must have known their young master's voice and touch so well.

In our own National Gallery in London, we have another touching child-picture by Velazquez: the little one, who kneels with clasped hands and adoring gaze fixed upon the suffering Saviour, while a grave, massive angel stands on guard behind him.

The last public event with which Velazquez had to do was the marriage of the young Infanta, Maria Teresa, with the French king, Louis XIV. The painter, as Marshal of the Palace, had to make the arrangements for the marriage festivities on the frontier, and it is thought that he overtasked his strength in planning and carrying out the magnificent pageants and ceremonial. He fell ill immediately afterwards, and died as he had lived, the faithful and untiring servant of the royal master for whom his life's work had been done. His portrait appears on page 77.

MARY H. DEBENHAM.

PUZZLERS FOR WISE HEADS.

4.—SQUARE WORDS.

- 1.—Where one stays.
Of the shape of an egg.
A lump—a collective body.
Otherwise.
- 2.—The coloured circle which surrounds
the pupil of the eye.
That which is left.
An island.
A movement of the foot.
- 3.—A circle—a sound.
A thought.
Very close.
A frame of timber or iron which opens
or closes a passage.

C. J. B.

5.—ARITHMOGRAPH.

- A word of five letters.
- 3, 2, 4, 1—an extremity.
 - 3, 2, 5—to change colour in the sun.
 - 3, 4, 5—a metal.
 - 1, 4, 3—illuminated.
 - 5, 4, 1—nothing.
 - 1, 2, 4, 3—a common fluid, in a foreign dress.
- Whole—dead, belonging to a bygone time,

C. J. B.

[Answers on page 106.]

ANSWERS TO PUZZLES ON PAGE 39.

- 2.—(1) Snowdon. (2) Everest. (3) Etna. (4) Hecla.
- 3.—Nine-pin.

DECIDE QUICKLY.

QUEEN ELIZABETH was often a long time in deciding anything, and kept Sir John Hawkins waiting for many months before granting him permission to trade in the East Indies.

'Decide quickly, Madam,' at last said the sturdy navigator, tired of such long delays. 'Time flies, and the wings of man's life are plumed with the feathers of death.'

Permission was at last granted, and on the 31st day of December, 1600, a charter was given 'to the merchants of London trading with East Indies,' and thus began our great Empire in the East.

A STRANGE FISHING NET.

THE natives of New Guinea have a very cheap way of providing themselves with fishing-nets for use in their rivers and lakes. Cutting a long bamboo, they bend it into the shape of a large tennis-racket, fastening the small end to the staff or handle with fibre. This they take into the forest and leave it for a few days. When they call for it again, the huge spiders of the country have been at work, and covered it with a network of web strong enough to imprison any fish that may come in contact with its meshes. The bamboo is carried away, and no doubt the spiders wonder what has become of their new home, made with so much labour.

SIR PEGUS.

A True Story.

THE crate was plumped down just inside the back gate early one morning, and the small boy of the house gazed at the outside with much excitement, knowing well that the inside would prove more interesting still. He lived at a small poultry farm, and it was his business to provide the male birds with names; the females were too numerous for any such distinctions. But when the crate was opened and two enormous snow-white Aylesbury drakes waddled out, he was at first too overcome with wonder and delight to be able to find suitable names for them. He had already made use of the names of any notabilities that had crossed his narrow field of knowledge. Lord Roberts stalked proudly about with eight Buff Orpington wives; the Duke of Connaught was in charge of a pen of black Minorcas; but the two drakes so far surpassed anything that he had ever seen or imagined that he was forced to fall back on his favourite mythical heroes. To him the world of animals was far more wonderful than the world of human beings, and his two favourite heroes of romance were the famous horses, Bucephalus and Pegasus. Therefore, with more appropriateness than he guessed, he named one of the drakes Sir Pegus, and the other Ceph'lus. Pronunciation was not yet his strong point.

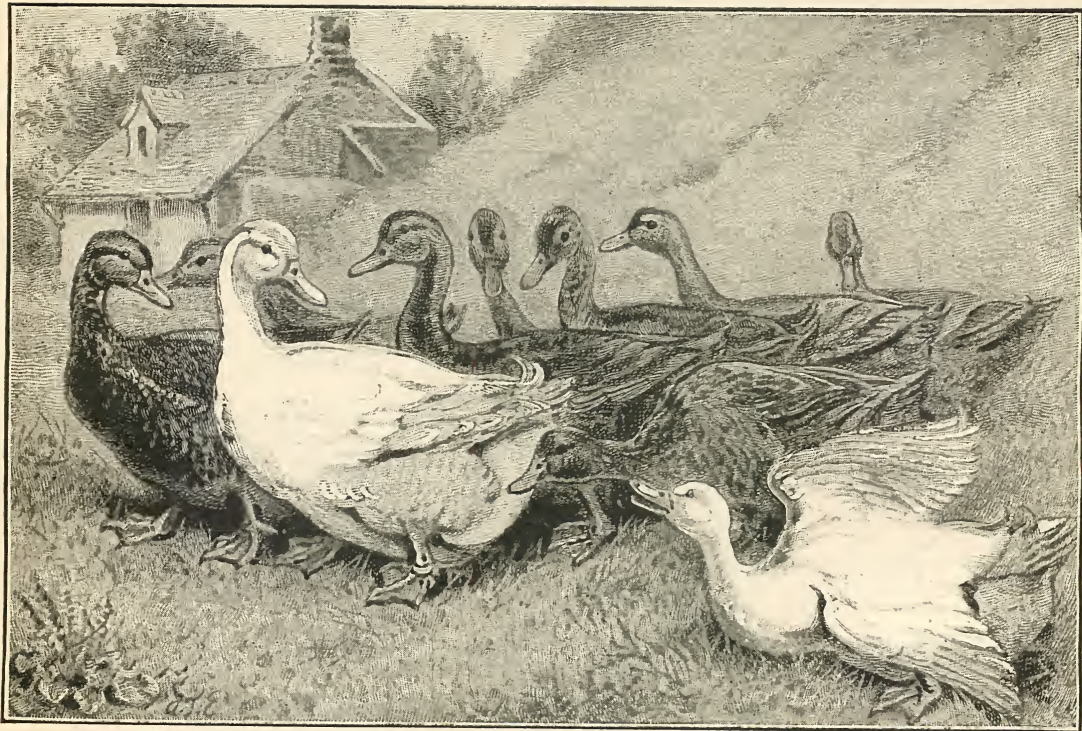
For some weeks the two drakes waddled contentedly side by side at the tail of the line of loudly

quacking ducks, which emerged from the pond and clamoured for food whenever the mistress of the farm made her appearance in the neighbourhood. There was always a certain amount of dignity and almost apology in their manner, as if they were trying to explain that it was not their fault if their wives were so greedy and noisy. They spoke in gentlemanly and subdued voices, and it was only in moments of great excitement that they raised them to a vulgar pitch and quacked as loudly as the rest.

Then came a dismal day of tragedy. The mistress and the little boy were out, so they never knew exactly what happened, but when they returned there was a limp white heap on a grassy bank, surrounded by a scattered circle of feathers. Ceph'lus had been worried by a dog! He was still alive, and his mistress carried him gently to a disused stable, and made him a bed of clean straw. The wounds on his back were dressed, and in a few hours he began to revive, and was able to drink a few drops of water. For awhile he lay patiently on his bed of straw, and then he began to drag himself round the stable, and his mistress hoped he was going to recover. But, as he grew more active, the sad fact became apparent that Ceph'lus's back was permanently injured. He had become a hunchback. Yet still his mistress could not find it in her heart to issue orders for his execution. His appetite had certainly begun to improve, and even a cripple might otherwise enjoy robust health. So, when a bright sunny day came, he was carried out of the stable and put on to the grass. He began to quack feebly with delight, and when the ducks, followed by Sir Pegus, came waddling up to see if their mistress might possibly be going to give them an extra meal, Ceph'lus endeavoured to join them.

The ducks glanced at him casually, and then scuttled noisily after their mistress, who was going towards the house. Not so Sir Pegus. As soon as he saw his sick friend, he left his position at the tail of the noisy crowd, and, waddling across the grass, seemed to make anxious inquiries as to the state of the invalid's health. He nodded his head up and down like a china Mandarin, and kept up a gentle, encouraging 'guk-guk-guk-guk,' as if he were a mother soothing a sick baby. Poor Ceph'lus gazed up gratefully, and in a little while, encouraged by his friend, he attempted a short walk round the field. Sir Pegus kept close to his side, talking to him all the time in the same gentle, quacking murmur, and stopping occasionally to point out juicy pieces of grass which he thought might tempt a delicate appetite.

From that day Sir Pegus was the self-appointed guardian and nurse of poor Ceph'lus. As soon as Ceph'lus was brought from the hospital in the morning, Sir Pegus left his wives to take care of themselves and spent the rest of the day in assiduous attention on the poor cripple. He would not eat any food till Ceph'lus had had all that he required; he never attempted to move at anything but the slowest pace, adapted to the invalid's hobble, and he never ceased to encourage him with his gentle 'ger-ger-ger-ger-guk.' One could imagine so well the words he was using. 'There then, come along,



"Ceph'lus endeavoured to join them."



"Two enormous snow-white drakes waddled out."

you poor dear. Now, don't hurry ; take your own time. Don't you think you could fancy that nice slug under the leaf, or shall we go and see if "missus" could give you something you would like better? You mustn't be down-hearted on such a fine day. You'll soon be all right again! Guk-guk-guk!"

But as time went on poor Ceph'lus grew worse instead of better. He still followed Sir Pegus everywhere with grateful affection, but his step became slower and slower, and the mistress and the small boy often watched him sadly. Then at last the master too was called into consultation, and the verdict went forth that it was no kindness to prolong the sick bird's life. There were so evidently internal injuries which were worse than the external ones that it was hopeless to expect a cure. So one morning Ceph'lus did not leave the stable at the accustomed hour, and Sir Pegus was not called away from the care of his wives.

I should like to record here that Sir Pegus mourned disconsolately or even that he broke his knightly heart of grief ; but this is a true story, and it must be related that only with the greatest difficulty did his mistress manage to persuade herself that Sir Pegus noticed his friend's absence at all. From that day he waddled contentedly at the tail of the quacking procession as if no chivalrous episode had ever occurred to disturb the placid round of every-day existence.



DIEGO VELAZQUEZ.

(See page 74.)

INSTEAD OF THE SUN.

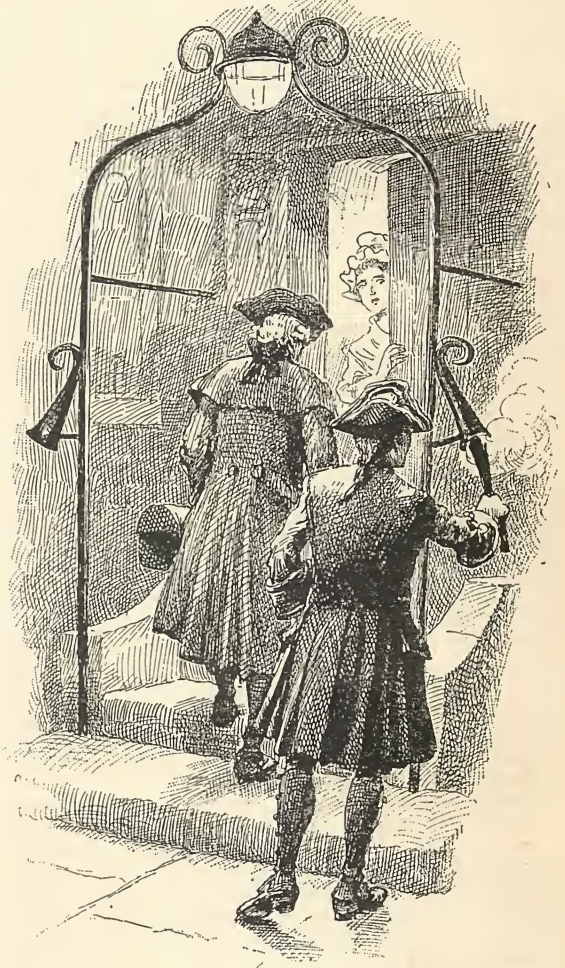
III.—TORCHES AND LINKS.

WE have seen how difficult and troublesome it is for savages to make a light, and we cannot be



"The cresset-bearer carried it like a halberd."

surprised that they take great care to save themselves this labour whenever they can. When the Australian bushmen, who are always moving from place to place, have only a short journey before them, they often carry with them a burning stick or two, taken from the fire, with which to light a new fire at the place where they next encamp. The



"He put out his link by thrusting it into one of the extinguishers."

wandering Arabs sometimes carry fire with them from place to place in little firepots or brasiers. Many of those people who live settled lives, and remain always in one place, keep some of their fires always burning, and even in England, in those days when flint and steel were the readiest means of making a light, fires were often kept alight day and night for years at a time, in order to save the trouble and delay of lighting them by a method so slow and uncertain.

Perhaps you will ask what this has got to do with light? Well, any one who has a fire has also

a ready means of obtaining a light. Thus, when a native of Australia wakes up thirsty in the night, and wishes to go to the well for a drink, he picks up a piece of dry wood or bark, twists a handful of dry grass round it, and lights this torch at the fire. This is his convenient lamp, which not only lights his path, but, as he thinks, scares away the goblins, of which he is very much afraid.

In the north of India the houses of the Shokas are lighted with burning sticks of pine, which are stuck into holes in the walls. Mr. Layard, a noted English traveller, was once present at a feast in Armenia, when the banqueting-hall was lighted with bundles of flaming rags, which had been soaked in bitumen. The rags were placed in iron baskets set upon the tops of high poles. The natives of Guiana, in South America, sometimes burn lumps of pure resin for a light. These pieces are broken off the trunk of a very resinous tree, and serve as torches, apparently without any further preparation.

In bygone times similar modes of illumination were made use of in our own country. Torches, made of sticks, twigs, or fibres, which had been dipped in resin, were burned in the great halls of the old castles, though candles and lamps were also known. For lighting the way, especially for carriages and great bodies of men, there was scarcely anything better than torches until very recent times. In the year 1703 the King of Spain paid a visit to England. He landed at Portsmouth, and was received by the Duke of Somerset, who took him to his house at Petworth, in Sussex. Prince George of Denmark went from Windsor to Petworth to meet him, and although the distance is only about forty miles, the Prince had to set out in his coach at six o'clock in the morning, and he did not reach Petworth until about eight o'clock at night. He was accompanied by torch-bearers to light the way in the morning and evening, as the journey was made in December, when the daylight was short.

Among the armour and weapons preserved in the Tower of London there is a cresset or firepot, such as was frequently used for lighting the way for troops or processions in the old times of Queen Elizabeth or Queen Anne. It is a little iron bowl, suspended in a fork or ring at the end of a long pike. A piece of tarred rope, or a mass of tow which had been dipped in resin, oil, or pitch, was placed in the bowl and set on fire, and the cresset-bearer carried it like a halberd or a spear as he walked in the ranks of the procession. The bowl was hung upon pivots, so that it remained mouth upwards, no matter how the bearer moved the pole. Sometimes the bowl was replaced by an iron basket, and this form is interesting because it shows us that oil was not as a rule used in the cressets, but something solid, which had been soaked with a highly inflammable substance, like the rags soaked with bitumen, which lighted the feast in Armenia.

Until the streets of London were lighted with gas, and even for some years afterwards, those whose business or pleasure took them out at night were lighted on their way by torch-bearers. Wealthy people had often their own footman to carry a light before them wherever they went; but many boys and men with torches, or links, as they were com-

monly called, waited in the streets to be hired by any one who had need of their services. The link-boys, like the news-boys of to-day, were to be seen everywhere, and seemed to be always present when mischief was brewing. For these reasons they are very frequently introduced into the sketches of the comic artists of those days. And though the link-boy has now completely disappeared, because there is no occupation for him in our well-lighted streets, there are still in London some curious reminders of his work. In many of the old squares and streets there are ornamental iron pillars in front of the doors of the houses, which have evidently supported lamps in bygone times. By the side of these lamp-supports we may occasionally see a sort of straight iron trumpet, the use of which it is not easy to discover. But the fact is that these trumpets are really torch-extinguishers. When the footman or link-boy had brought the people of the house safely home, he put out his link by thrusting it into one of the extinguishers.

W. A. ATKINSON.

THE CONTENTED BOY.

I'M glad I'm not a mighty whale
To swim beneath the ocean,
And swallow wriggling fish alive—
A most disgusting notion.

I would not be a sparrow-hawk
To pounce on bunny-rabbits,
And eat them—bones and fur and all—
I do not like such habits!

I'd rather be a little boy,
To dine on beef and mutton,
And though I cannot swim or fly,
I do not care a button.

A. KATHARINE PARKES.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 67.)

CHAPTER IX.—DON ALVAREZ COMES ABOARD.

NEXT morning a court of inquiry was held, but nothing resulted. The life on board went on its ordinary course, and a good passage was made across the Bay. Nothing could be more mysterious, more terrible, than the way in which poor Stevens had disappeared; there could not be the least doubt that he had been murdered, but there was not a particle of evidence to show by whom the deed had been done or for what reason; and this very absence of apparent motive made the whole affair more terrible to the imagination and more shaking to the nerves.

The only incident of note during the rest of the run to Gibraltar occurred the morning on which they sighted Cape Trafalgar.

It was just after breakfast, and O'Brien was standing talking to Mr. McGrath, who was seated smoking a pipe on the main hatch, when shouts were heard coming from the paying-out office.

Teddy, with recent events in his mind, was making in the direction of the sounds, convinced that old

Mr. Lockhead was being murdered, when out of the paying-out office dashed Sloper, followed by the senior accountant, his white hair blowing in the wind.

Sloper had Mr. Lockhead's spectacles on; they had got tangled in the fur behind his ears, and he was making frantic efforts to get them off and to run at the same time.

The mischievous creature had stolen into the office, seized the spectacles, put them on, and now this was the result.

In ordinary times every back-stay, every rope's-end, the ratlines, even the funnel-stays, were a refuge for Sloper, who, after a misdeed, would whip up aloft and remain there till things had blown over. But he could not now, for the spectacles half blinded him, and he could only rush hither and thither at random, with Mr. Lockhead at his heels, and the whole ship's company urging on the chase and applauding.

Down the saloon stairs he went, along the alley-way, through the square, across the cable deck, up the cable deck companion-way, and then round and round the testing-room.

The cook had placed a slush-tub on the deck just near the sheep-pen, and as Sloper dashed round the testing-room for the last time, one of the deck-hands with a mop suddenly headed him off, and right head-over-heels into the slush-tub went Sloper, spectacles and all.

When they got him out, he was, as Mr. Toms said, a spectacle, but the spectacles were uninjured, which was the main point.

By twelve o'clock they were abreast of Tariffa, and eastward loomed Gibraltar, 'grand and grey.'

They were to stop at Gibraltar to take on board Don Alvarez, a Brazilian, who was coming overland from London.

'And that's Gibraltar!' said Marley, as the great rock hove out of the blue like a cloud. 'I thought it was bigger!'

'Oh! you'll find it big enough when you're under it,' said Jones, the third officer, 'and so would the Germans or the French if they were before it. There are guns there that can hit the African shore almost.'

'Who is it whom we have to meet at Gib?' asked O'Brien.

'Don Alvarez, a Brazilian man. No end of a swell. We shan't stay more than a day at Gib; of course the old man will have to see the Consul over the Stevens affair and make depositions. Hullo! there's the luncheon bell.'

It was three o'clock before they came into Gibraltar harbour, under the guns of the greatest fortress in the world.

The captain, in his best uniform, with his log-book under his arm, got into the gig, and was rowed ashore to interview the Consul, and the rest of the officers stood about on deck, smoking and talking and pointing out the details of interest, as though they had not seen them twenty times before.

One of the most interesting sights of Gibraltar harbour, though I have never seen it mentioned in books, consists of the coal-hulks. There are half-a-dozen of them dotted about here and there, dismasted and desolate-looking; yet could the history of some

of those old ships be written, it would make a very strange story indeed.

'Do you see that ship?' said Mr. Toms to Marley, as he pointed to a wall-sided and sinister-looking craft floating high in the water. 'She's the *Three Brothers*.* The story of that ship would make your hair stand on end. I saw her come into Frisco harbour in 'seventy-two: half the men in irons and the rest of them nearly mad. She's been found twice floating derelict in the Western ocean, not a soul on board. If you go aboard now you can still see the bullet-marks on the brass of the steering-wheel and the cutlass-marks on the bulwarks.'

'She was what they call a "hard ship,"' said the third officer.

'Yes,' said Toms, 'and her captain was a hard case.'

'Used he to ill-treat the men, sir?' asked O'Brien.

'Ill-treat is not the name for it; life on board that ship was one perpetual round of torture and starvation.'

'But why did he treat them like that, sir?' asked Teddy.

'Why? I will tell you why. He'd ship a crew at Liverpool for the return journey to New York, and he'd lead them such a life that they would bolt off the vessel as soon as they got to New York, and go without any pay. You see they couldn't make him pay 'em, for they broke their contracts by leaving the ship without working the return passage. So he got their services for nothing, and their food,' concluded Mr. Toms grimly, 'did not cost much.'

At five the captain came back.

'It's all right,' said he to Mr. Jones, the third officer. 'The Consul has the affair in hand, and there will be a full inquiry when we get back to London, but it won't stop us here. Don Alvarez is here, I believe, and is coming off in an hour, and we can start early in the morning. Get the side manned for him and put down new ropes.'

All the sailors were crowded together near the fo'c's'le hatch, and O'Brien, followed by Marley, went to see what was going forward. The crowd consisted of stokers and foremast-men, and poor Stevens' things were being put up for auction.

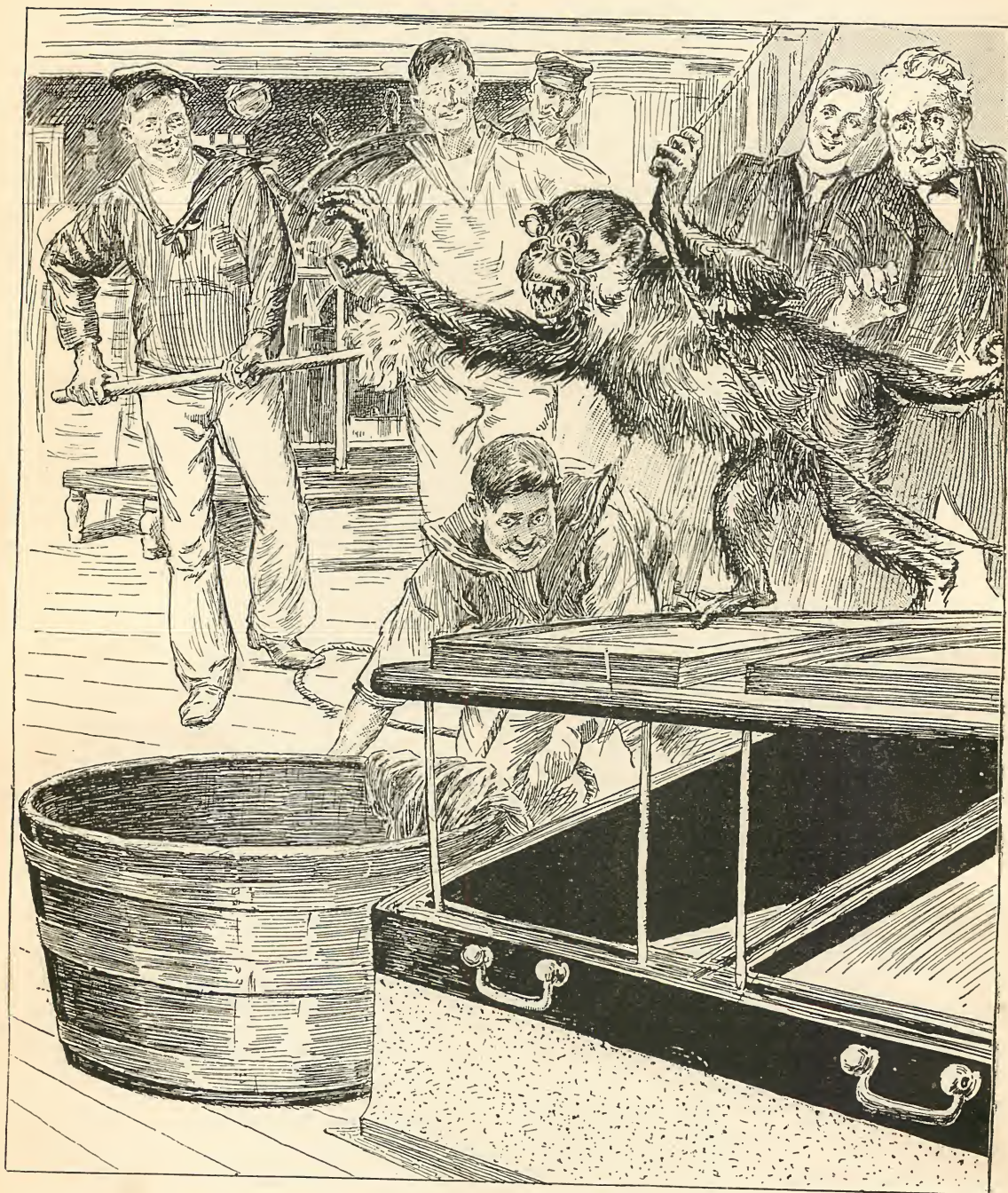
The cable-hands held aloof. The cable-hands, eight in number, headed by the Kipper, were all picked fishermen from the East coast, splendid men able to launch a boat from a ship's side in almost the roughest sea. Descended from Vikings, these men could do anything with a boat that man could possibly do. They were paid high wages and berthed by themselves off the cable-deck, a huge space under the main deck forward of the engine-room.

They all stood now in a group, watching the proceedings, and criticising the foreign sailors, whom, since the tragedy of poor Stevens, they suspected and disliked.

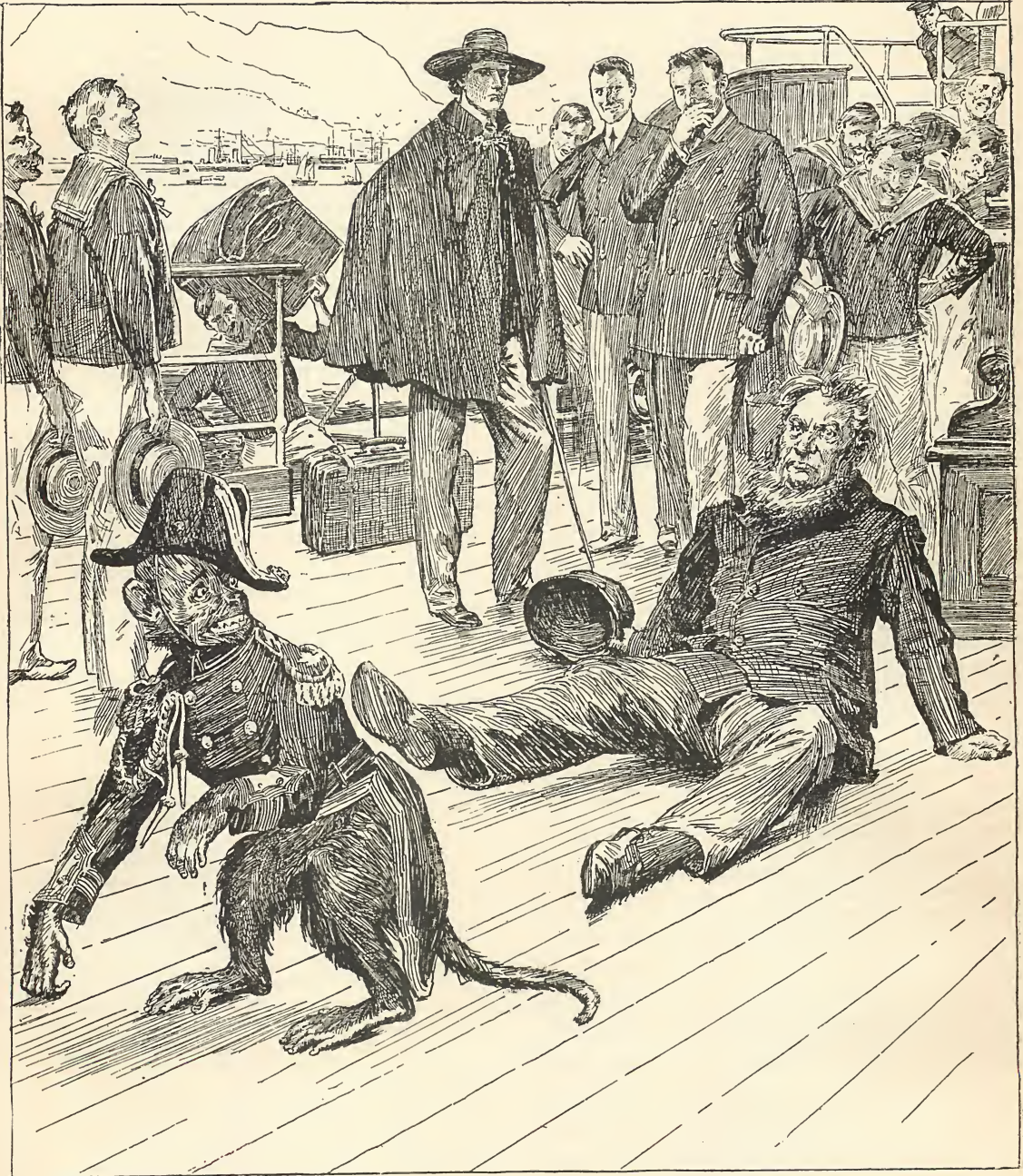
As the auction proceeded, Teddy's sharp eye noticed that, though all the other sailors bid, the Russian Finn stood out and made no offer; but he did not notice it long, for the chattering of Sloper just behind drew his attention.

(Continued on page 82.) -

* The *Three Brothers* was acting as a coal-hulk at Gibraltar four years ago, and I believe is still doing so.



"One of the deck-hands with a mop headed him off."



“Captain Sprott slipped and fell heavily.”

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 79.)

THE Kipper was dressing the monkey up in its little admiral's uniform.

This was always a difficult business, for Sloper strenuously objected to be dressed up. Once the clothes were on, he did not mind—rather liked it, in fact, to judge by the way he bore himself. When the cocked hat was fixed on his head, the Kipper let him loose, and my Lord Admiral Sloper sat down on the deck and began to bite the end of his tail. Now, the end of his tail was bound round with spun yarn to prevent him biting it, for some monkeys get into the habit of biting their tails, and it does them great injury.

He sat on the deck for a moment or two biting viciously at the spun yarn; then he flashed up the rigging, cocked hat and all.

'If you drop that cocked hat into the sea,' shouted the Kipper after him, 'I'll give you the biggest licking you ever had in your life!'

'Hullo!' said Teddy, who had been looking shoreward, 'here's Don What's-his-name, isn't it? What do you say, Kipper?'

The Kipper shaded his eyes and looked towards where a white boat, manned by four sailors and with a flag trailing at the stern, was approaching the ship.

'That's him,' said he, regardless of grammar; 'that's the shipping agent's boat, and that's the Brazil colours.'

'Come along aft, Dick,' said O'Brien, 'and let's see him come aboard—let's help to swell the pomp of the reception. You'll see old Sprott kow-tow; he always does to these Government folk.'

'What's kow-tow?'

'Going on your knees and licking the deck with your tongue. He doesn't exactly do that, but next door to it.'

Captain Sprott and the officers were standing at the gangway-opening in the bulwarks abaft the bridge; the landing-stage was down with a new rope for balustrade—a gorgeous rope, for it was covered with red baize.

The shipping agent's men laid their boat cleverly up to the grating, where a quartermaster with a boat-hook was waiting to receive them, and Don Alvarez, a tall young man, very dark, and wearing a sombrero, sprang on to the stage and came up the ladder.

He was not a prepossessing-looking person, though good-looking enough. He had a hard, sharp, determined face, he was clean-shaved like an actor, and his mouth seemed the mouth of a man who never in his life had smiled.

'Captain Sprott, I suppose?' said he, lifting his sombrero the eighth of an inch, and speaking as if the captain were dirt beneath his feet.

'The same, sir,' said Captain Sprott, hat in hand. 'I have the pleasure of addressing Don Ramon Alvarez, the representative of the Government of Brazil?'

'I am that person,' said Don Alvarez. 'And you, I suppose, are the gentleman conducting this expedition under me?'

A loud chattering behind Captain Sprott seemed to say, 'No, no; I am the gentleman conducting the expedition—just you look at me!'

The captain turned, and, in doing so, stepped aside, disclosing Sloper, who, hat in hand, was chattering, and jabbering, and bowing, as far as a monkey can bow, and apparently addressing Don Alvarez. He was, in fact, acting the part of Captain Sprott to the life, except in one particular: his mock civility was plainly disguised impudence, and one could see at a glance that the monkey remarks he was addressing to the Don were not compliments.

There was silence for a moment, and then a yell of laughter went up from the on-lookers such as had never been heard on the quarter-deck of the *Kingfisher* before.

The Don's brow darkened, his cheek flushed slightly, and he looked very evilly at the grotesque little figure on the deck before him.

As for Captain Sprott, after a moment of dead silence, he made a mad rush at the author of all this disturbance, aimed a kick at it, which, if it had landed, would have skied Sloper over the funnel, and, missing, slipped and fell heavily.

Another shout of laughter went up, and this time the Don smiled.

'When the performance is quite over,' he said, addressing the first officer, 'I think I will go down to my cabin; will you kindly show me the way?'

CHAPTER X.—TEDDY GETS 'LOGGED.'

DURING the whole of this business, Teddy, who laughed as a rule at everything and nothing, had not once smiled.

'Why, Ted!' said Marley, 'what on earth's the matter with you? You're looking as white as a sheet.'

'I feel pretty queer,' said Teddy, in a low voice. 'Come here to the after-gratings and sit down. That chap—'

'Yes?'

'That chap, Don Alvarez, is one of the fellows that sat beside us the night at the Hippodrome.'

'One of the men—'

'Hush, speak lower. Yes, one of the men I told you of, and the worst of them too, for it was he who said that things would have to happen just as they would happen. I forget how he put it, but it gave me the impression that he didn't care a button if the whole ship's company were killed or not. How did he get here so quick from London? Why, you can come down here from London in a couple of days by the South express.'

'What shall we do?' asked Marley.

'I don't know,' said Teddy; 'you see this chap is such a swell, he is master of the expedition; of course Sprott is captain of the ship, but then the ship is hired by Brazil. I have no one to back my yarn. You didn't hear what these fellows said, and unfortunately I'm not in favour with Sprott.'

'I know what we must do,' said Marley suddenly, and with an air of inspiration.

'What?'

'Go and tell the whole thing to Mr. Lockhead, and ask his advice.'

'That's not a bad idea,' said O'Brien. 'It will

relieve my feelings, anyhow, for I tell you what, Dick, I'm in a funk over this business. I'm not a funk in the ordinary way, but there's nothing ordinary about this; it is like seeing a storm coming on and not being able to get out of the way, or being tied down on a railway track and seeing an express coming a long way off. Go and peep into the paying-out office, Dick, and see if the old boy is there.'

Dick went and peeped in at the little window, and then turned and nodded his head.

O'Brien got up and went to the door. 'Mr. Lockhead,' said he, entering, 'could I speak to you a moment?'

'Certainly, O'Brien, certainly,' said Mr. Lockhead, turning round on his stool, whilst Teddy drew Marley in and shut the door. 'Is it anything of importance?'

'Of the greatest importance, sir. I have something on my mind.'

'Oh, Teddy, Teddy!' said the old gentleman, 'what have you been doing now?'

'There you are, sir!' burst out Teddy, his Irish temper coming to the surface. 'It's enough to make one turn a criminal or something. I'm always being suspected.'

'If you'll let me, sir,' said Marley, 'I'll tell you about it. Teddy's been doing nothing, but we went to the Hippodrome the night before we came on board, and O'Brien was sitting beside two fellows who were talking in Spanish; he heard them mention the name of this ship, and then they talked about getting rid of the people on board.'

'God bless my soul!' cried Mr. Lockhead. 'What are you telling me, Marley? What? where? Good gracious, goodness me!'

'But that's not all, sir.'

'Not all?' cried Mr. Lockhead, jumping off his stool as if some one had touched him with a hot poker. 'Not all? Go on—wait—where are my glasses? Oh, here they are—proceed.'

'The dreadful part of the thing, sir, is that Don Alvarez, the Brazilian Commissioner, who joined us to-day, was one of the men.'

(Continued on page 94.)

A GUSTY DAY.

THE four young Winds, who learn their work
In far-off nooks and crannies,
Have begged a holiday to-day
From their respective Grannies.

I ventured forth to take a walk—
My custom every morning—
And all the four, with boisterous mirth,
Rushed at me without warning.

The biting North Wind nipped my nose,
The East Wind made me shiver,
The South and West together blew
My hat into the river.

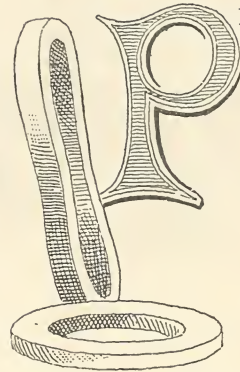
Remembering that 'the better part
Of valour is discretion,'
I homeward turned, and willingly
Left them in full possession.

NOBODY KNOWS WHAT.

WHEN Captain Cook was surveying the coast of New Zealand in 1772, he named a part of Dusky Bay, which he was unable to enter, 'Nobody Knows What,' and marked it thus on his chart.

Some twenty years later, Captain George Vancouver, a British seaman who first sailed round the island that bears his name, was also surveying part of New Zealand, and was able to enter the part of Dusky Bay which Cook had left unexplored. So he finished Cook's work, drew a correct coast-line on the chart, and named it 'Somebody Knows What.'

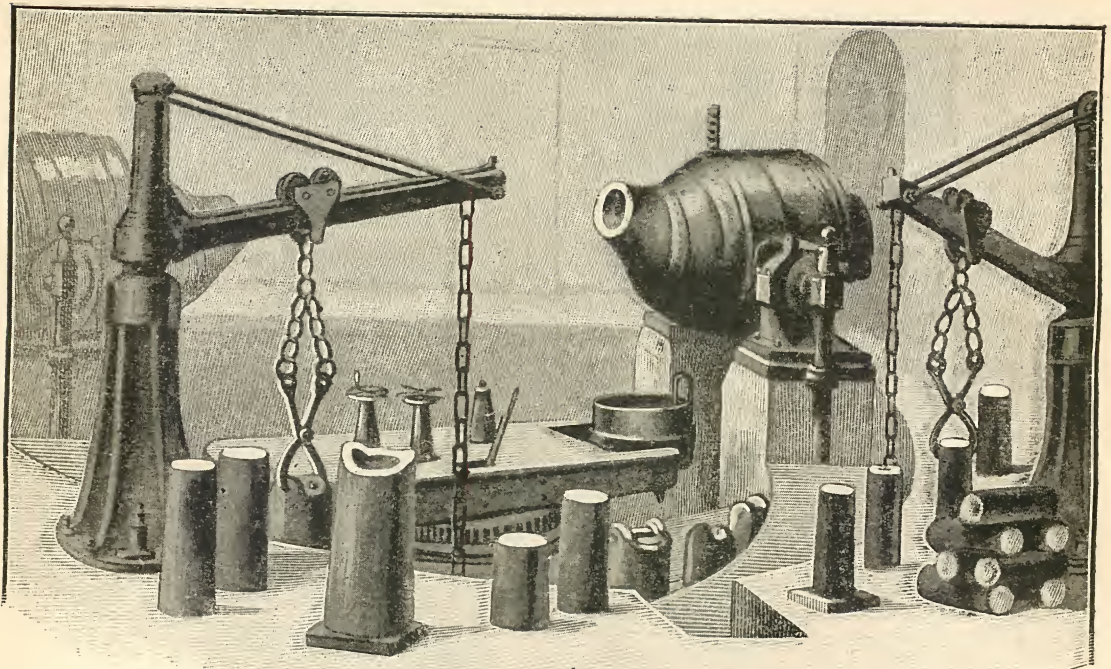
THE BESSEMER STEEL PLANT.



PERHAPS it is a good thing that among the models at South Kensington Museum the Bessemer steel plant tells its story without doing any actual work, for it is said that the light given out by the burning gases while the metal is being converted into steel is so intense that it will cause an object to cast a shadow in the brightest sunlight.

Before the year 1856 the process of making steel was very expensive and laborious. Men with heavy iron rakes had to stand before furnaces of blinding liquid iron and stir it to and fro with the rakes until it had been puddled sufficiently to turn it into steel. Even then it was of very inferior quality.

At last Sir Henry Bessemer, the great inventor, having thought the matter out, discovered that if air could be forced through the molten iron at a great pressure, it would cause certain chemical impurities to be destroyed, and leave nothing behind but steel. To accomplish this he constructed what are called converters, large and powerful iron vessels, almost round in shape, and lined with a composition which enables them to withstand great heat. A number of fire-clay pipes, not unlike those we see on the tops of chimneys, are also fitted into the converter. Near one end of each are several tiny holes. In the model at the South Kensington Museum there are two of these converters, one on each side of a casting-pit, suspended by their centres so as to swing over when required. A crane, in the shape of a long iron movable platform, extends from side to side of the pit, with a large iron caldron, called a ladle, at one end. The driver of the crane can swing it round so that the ladle comes under the mouth of either of the converters. When the latter have been filled from above with molten iron, the air is forced by powerful pumps into the fire-brick pipes already mentioned, and, passing through the tiny holes, mixes with the liquid metal. When this has been going on for a certain time, the crane swings its ladle under the converter, receives from it a load of



The Bessemer Steel Plant.

the new metal, and pours it in turn into a number of moulds or casts standing ready all round the pit-side. Above are two other common cranes, which presently lift the moulds or their contents out of the pit and arrange them in stacks ready for further treatment. Thus the steel plant does its duty from end to end in a regular and orderly fashion, and perhaps that is why it gets through such a quantity of work in the year.

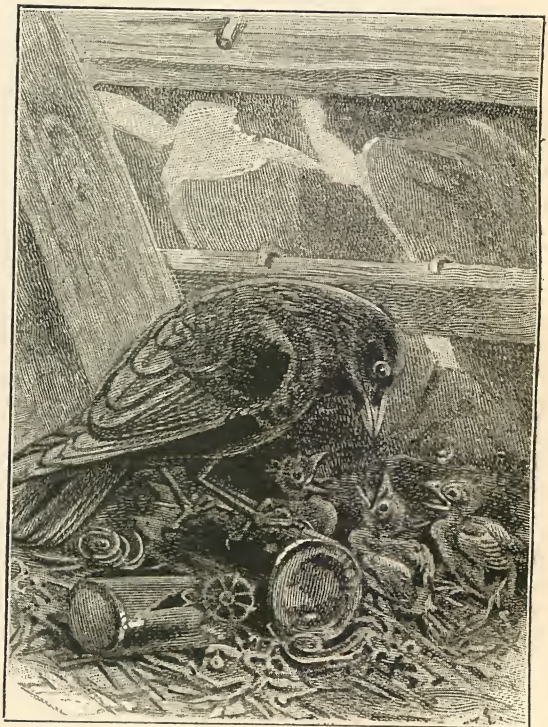
Before 1856 our train-rails were made of wrought iron, and occasionally dreadful accidents were caused by these rails breaking; but since Sir Henry Bessemer's great discovery, which made first-class steel cheaper to produce than common wrought iron, railway disasters have been fewer, for no strain will snap this converted steel. At a recent great exhibition, visitors were shown a curiosity which left no doubt on this score. It was a piece of Bessemer steel, the length and thickness of a railway metal, unbroken, but bent while cold and tied into a knot, like a piece of string.

ANIMAL MAKESHIFTS.

True Anecdotes.

III.—CURIOUS CRADLES.

GREAT cleverness is often shown by animals in providing safe and comfortable nurseries for their young, though they themselves spend a roving life and need no fixed abode. In preparing a cradle,



A nest out of bits of soda-water bottle and wires.



•The mouse and her little ones had their nest in the food-trough.”

the mother, who generally takes the lead, keeps, if possible, to the plan used by her ancestors, choosing for her little ones a place like that in which she herself was born. But this rule is often set aside when

the parents are not living perfectly free, natural lives, or when the familiar materials and right spot are impossible to find. In such cases, the creatures use the skill and common sense which

guides them to put up with the best makeshift they can. With that mysterious trust in one another which in times of distress never seems to be misplaced, they will, on the strength of having a family to protect, take refuge with the sternest of their enemies.

A lady writes from Clevedon: 'I was told a few evenings ago by a gentleman that he had a favourite pointer who, on several occasions, refused to let him rake out the straw in the kennel, which my friend did in order to make it more comfortable. The dog was watched, and a large mouse with her little ones was seen to feed out of the trough with him; the kennel being examined, it was found that the mouse and her little ones had their nest in the food-trough.'

The *Field* mentions another heroic mouse-mother. It was noticed that the tail-feathers of a handsome Bramah hen, sitting on eggs in a basket wrapped round with a sack, grew so much frayed and broken as to resemble a mere bundle of old quills, though nothing was near against which she could have rubbed them. When the chickens were hatched, and the mother and her brood taken away, it was found that a mouse had built a beautiful nest under the basket. The outer part of it was woven of tow scraped from the sack, while the lining was made of bits of feather from the hen's tail, a morsel at a time as wanted, the stumps showing marks of the little robber's sharp teeth. Whatever the hen thought about having her beauty spoilt, it is plain that she forgave the spoiler, for a single blow from her powerful beak would have put an end to the pilferings for ever.

The disused nests of birds often 'come in handy' for those who never build them. Domestic animals can never perhaps quite carry out their views as to a home for their young, but everybody must have noticed how fond pussy is of scrambling up a tree. She likes, too, to sleep on some high shelf or other lofty perch. This is because her forefathers were arboreal or tree-living animals. Even now, if puss lives near a wood or forest, she will sometimes escape and dwell as her ancestors did. Not long ago a boy at Maldon in Essex climbed up a high tree, to a large nest near the top. When he reached it, instead of young birds, he found a mother cat and three small kittens snugly curled up inside. Similarly the squirrel and dormouse make use of deserted birds'-nests, the field-mouse of the mole's empty burrow, the kingfisher of the water-rat's disused run, and the humble-bee and the wasp, of the tunnel abandoned by a mouse.

The materials used by animal builders when at a loss are as queer as the places chosen. When in a hurry, or unable to obtain what is warm and soft, they make anything do. The eider-duck pulls the softest down from her breast wherewith to line her baby's cradle, plucking half a pound of it away (a great quantity in bulk), which she so arranges that she can roll back her quilt and pull it back to keep the eggs warm when she goes out. If thoughtless people steal her bedding, she replaces it—once, twice; the third time, if the thieves are relentless, her mate will strip himself bare to the freezing Arctic blast.

The mother rabbit tears the down from her breast for a similar purpose.

But though warmth and softness are the objects in cradle-making, these luxuries cannot always be had. The pigeons in the Wilson Tower of Clifton College, who were driven to build their nests entirely of galvanised wire which was lying about the top, loved their young none the less; nor was a certain crow in Calcutta an unnatural monster for building *his* out of bits of soda-water bottle and wires picked up in a backyard. In manufacturing districts, birds' nests are found built of pieces of watch-spring, showing that necessity is the mother of invention, not that parents are indifferent.

Throughout the insect world the same solicitude prevails. A very striking instance of insect-care was shown to an officer in India, who was sitting at his writing-table when an exquisite little shining fly flew in at the window. After much trouble she seemed to choose out one of the quill pens he had been using, and into this tube she rammed a green caterpillar, and next her own eggs, lastly corking the whole tightly up with a stopper made of fine clay, which she fetched for the purpose, thus securing nursery and larder in one. Forethought of this kind is, in the insect tribes, the more remarkable, because they seldom live to see the young for which they so elaborately provide. One of the most despised and abhorred of creeping things, the common earwig, is almost the only insect which hatches her eggs under her own body. She mounts guard over the little ones; she fights for and shelters them as long as they are helpless, as a hen tends her chicks: a humble example of that tender mercy which is over all the Creator's works, from the blue sky above to the dust beneath our feet.

EDITH CARRINGTON.

SYDNEY'S GOVERNESS.

DR. GREEN had decided that Sydney Leigh ought not to return to school next term. An attack of measles had left a weakness of the throat, and the boy was run down, the doctor said, so his parents arranged that he should carry on his studies with Miss Lane, his sisters' new governess, for the present.

Sydney was very much vexed. It seemed to him so babyish to have lessons with girls; no boy who had once left home for a boarding-school ever did.

However, by-and-by he began to console himself with the thought that probably his work would be easy. Margaret was only ten, and Ivy only eight, and no doubt Miss Lane would not understand how they went on in boys' schools, and he supposed she did not know any Latin; at any rate, he would not pay much attention to her.

But he reckoned without his host, for Sydney's parents had placed him entirely under Miss Lane's control during the hours of lessons, and although these were few, she required him to do his work thoroughly.

Sydney found that she was well versed in Latin and in all the other subjects he had been studying at school, and soon she pointed out several careless habits which he had formed unconsciously.

Then Sydney rebelled.

He could not do anything very outrageous because he was afraid his parents might hear of it, but he began to annoy Miss Lane in various little ways. He pretended to upset the ink, or to drop his pencil-box by accident. He would let the door swing to with a bang when the window was wide open, or come into the schoolroom with muddy boots, and sometimes he put the clock forward several minutes when it was time for morning lessons to begin.

At first Miss Lane did not suspect that these tricks were done on purpose; she put some of them down to a boy's heedlessness, and said very little when they occurred. But one day, when Sydney overturned a vase of flowers, and the water in it spoilt Margaret's French exercise, Miss Lane spoke sharply.

'Sydney,' she said, 'you behave like a pettish baby; what has vexed you that you should do such a thing as that?'

Then Sydney knew that Miss Lane had been watching him, and had seen that the movement he made in upsetting the vase was not accidental. He became very red, and muttered something about 'hating to have the horrid vase near him.'

Miss Lane said no more, but she made Sydney fetch a cloth and sop up the water himself.

It was quite beneath his dignity to do that, Sydney thought, and his temper was ruffled as he caught Margaret and Ivy smiling.

'This comes of doing lessons with girls,' he said aloud, as he sat down to prepare his Latin translation.

He looked up for a second to see what effect his words had on Miss Lane, and he saw a smile on her face, though he had expected she would be annoyed.

This was too much for Sydney; he felt that, after all, his little tricks had not much power to vex her, and she had called him a 'pettish baby.' Well, he would leave off his smaller attempts, and do some big thing to make her jump.

What a fine tale he would have to tell the chaps at school when he returned!

He was very quiet and amiable in the schoolroom for several days after he had upset the vase, and Miss Lane hoped that he was improving; but he meant to do mischief when a favourable occasion should offer itself.

One Saturday morning Mr. and Mrs. Leigh went away to visit a friend for a few days. Mr. Leigh's sister came to take charge of the house, and the children were left under the control of Miss Lane. Sydney thought he would now watch for an opportunity of doing something to startle her, and he found it presently.

One afternoon his aunt was out, and the children were to have their tea in the schoolroom with Miss Lane. Sydney sauntered into the room just before his sisters and the governess came in. The tea-table had been nicely set out. There were vases of roses and two sorts of jam on the table, and cook, as though wishing to console the children for their parents' absence, had brought out one of her best cakes. An idea occurred to Sydney, and he waited

until the girls and Miss Lane were seated; then he drew his chair slowly towards the table, looking across it out of the window as he came.

'See, see!' he exclaimed suddenly; 'what is that in the garden?' and as the others turned their heads to look, he let the chair fall, and allowed himself to fall after it with a loud scream, grasping the tablecloth as he went, and dragging almost everything down on to the floor.

Sydney got up and began to rub his knees as though he were in great pain, and pretended to be very sorry about the confusion of the tea-table and the broken china; but Miss Lane was not to be taken in this time.

At first, of course, she was very much startled and vexed to see the broken cups and saucers and the disorderly table; but while one of the servants was re-arranging it, she considered the matter for a few moments. There had been nothing extraordinary to see in the garden when Sydney called to them to look out, and she thought she had detected a false note in his scream.

She made no remark about the accident until tea was finished; then, telling the little girls that they might go into the garden, she said, suddenly, when they were gone, 'Sydney, I believe you did that on purpose.'

A reckless spirit was upon Sydney that evening. He kicked a chair with the end of his boot, and answered sullenly, 'What if I did?'

Miss Lane's only reply was, 'You can go out to your sisters now.'

It had been arranged that the next day the children were to make an excursion to a neighbouring village with some young friends and have a picnic on the common. Margaret and Ivy were delighted when they saw that the day was fine, and they talked excitedly to Sydney about all the arrangements.

Sydney had looked forward to this picnic with much pleasure, for a great friend of his and another boy had been invited, and he rejoiced that it would not be only a girls' party; and besides, they were to have donkey rides on the Common.

'Miss Lane,' said Margaret, when they had finished dinner, 'may I walk with Sydney, instead of driving with you and Ivy in the pony-carriage?'

'Sydney is not going,' said Miss Lane, quietly.

The children were taken by surprise, and Sydney most of all. He had expected that Miss Lane would give him lines, or an extra Latin lesson, perhaps, in a formal sort of way, just as they did at his school; but he never dreamt she would keep him from the picnic.

'I find that Sydney pulled down the tablecloth on purpose,' Miss Lane continued, 'so of course he cannot go.'

Sydney was greatly vexed. It was most mortifying that his friend and the other boy would know that he had been kept at home by his sisters' governess. But when his aunt remarked she was sorry to hear he must stay away from the picnic, he replied that he did not care about it.

'Only I shall always hate doing lessons with girls,' he added.

(Concluded on page 90.)

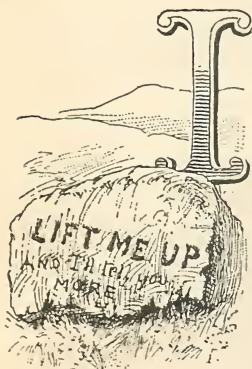


“Dragging almost everything down on to the floor.”



“‘Lay me down as I was before.’”

'LIFT ME UP!'



IN some parts of Scotland large rocks or boulders are sometimes found with ancient writings cut deep into them.

One such rock on a farm in Galloway had carved on it, 'Lift me up, and I'll tell you more.'

The farmer resolved to do so, and got together some of his men, and between them they did at last succeed in lifting the great stone; but instead of finding that it covered gold or some other treasure,

they found carved on the rock, 'Lay me down as I was before.'

They did so, and a group of disappointed men went slowly back to their every-day work.

WHO MINDS?

'WHO minds if I flower or not?'

Said a violet in a grot;
But two little eyes peeped through,
Saw the tender blossoms blue,
And a child said as she passed,
'Yes! Spring is here at last.'

'Who minds if I'm dumb or sing?'

Said a little feathered thing.
But a wee one 'neath the tree
Said, 'O birdie, sing to me!'
And the little birdie's song
Cheered that child the whole day long.

'Who minds if I smile or frown?'

Said two sad eyes looking down;
But a smile came dancing through
Like a beam down from the blue,
And a mother said, and smiled,
'Why, that's my own little child.'

SYDNEY'S GOVERNESS.

(Concluded from page 87.)

ONE day, a few weeks after the picnic, Margaret asked Sydney if he would come out with them all in the afternoon.

'I am going to fetch the bullfinch Mrs. Bright promised me,' she said, 'and you might carry it part of the way.'

'All right,' said Sydney, 'but it is a nuisance that Miss Lane has to go with us.'

During the walk to Mrs. Bright's they went along a road where there were several gardens with iron railings in front of them. Sydney had a walking-stick, and he drew it along the railings as he passed, making a clicking noise which was very disagreeable.

'Sydney, that is not a gentlemanly thing to do,' said Miss Lane, presently.

Sydney did not continue to make the noise, but he was angry and sulky, and walked for a little distance without speaking a word to Margaret. Presently Ivy, who was in front with the governess, ran back to tell Sydney that Miss Lane had just said they might go by the river fields to Mrs. Bright's.

'That's a lovely way, isn't it?' said Ivy. 'You always like to go by the river, don't you, Sydney?'

'Not with Miss Lane,' replied Sydney; 'she wants drowning in it.'

'Oh, Sydney!' exclaimed Ivy.

'You ought not to say such a dreadful thing, Sydney—it's wicked,' said Margaret.

'Well, she ought not to come with us,' was Sydney's reply.

Ivy looked sad, for she saw that Sydney was in a very unpleasant mood, but she ran back to Miss Lane, and very soon she was in the river fields, gathering wild flowers and chatting gaily.

'Miss Lane,' she said presently, 'would you mind getting me a few of those pretty leaves off that tree? Can you reach them? I think the green would look nice with my flowers.'

'I believe I can manage it, Ivy,' Miss Lane replied, and she stretched out an arm and made a little spring at the bough, but to the children's horror she fell backwards; there was a sudden splash, and they saw her disappear into the river.

Piercing screams from Margaret and Ivy rang out through the sunny meadows: as for Sydney, he felt as if he were turned to stone.

For a moment he could not utter a cry. There was no one to be seen as the children cast their eyes wildly in every direction for help, but the prolonged screams of the girls were heard at last by Mr. Bent, the landlord of a country inn at a short distance away on the opposite bank.

He instantly got out a boat, and pulled rapidly down the stream to find out what had happened, while the terrified children saw Miss Lane rise to the surface and then disappear again, and they redoubled their cries. The man in the boat shouted to them that he would soon be up to them, and he came down the river as if he were rowing in a race.

And now the children ceased their screams and watched him breathlessly and intently.

Just as he arrived close to them, something dark appeared again on the surface of the water, and how Mr. Bent managed to get poor Miss Lane into the boat the children could never say: all they knew was that she had been taken out of the river.

And then Sydney came to himself.

'I'll fetch a doctor,' he shouted, and he set off running at full speed. Never had he run so quickly as on that day, and all the time he ran his own words seemed to be pursuing him: 'She wants drowning in it.' What if Miss Lane were dead?

Dr. Green was on the point of going out when the boy arrived, breathless and tearful. Sydney could not speak more than a few words, but the doctor understood, and lifting him into the carriage he drove off as fast as his horse would go in the direction of the inn.

Sydney had forgotten all about his sisters, but he found them at the door of the inn, among a crowd that had already collected there.

The doctor hurried in without speaking to any one, and the landlord beckoned him into the parlour, where Mrs. Bent and a few others were giving 'first aid' to Miss Lane.

Mr. Bent asked the children to sit down in another little room while the doctor made his investigation. 'Don't you take on,' he said; 'she will be all right in an hour or two.'

He really felt very doubtful about it himself, but he thought he must say something to comfort the children.

'Don't you think you had better go home now?' he continued. 'I will send and tell you when Miss Lane is all right again. Your mother doesn't know about this affair, does she?'

'Oh, no!' replied Sydney. 'Let us go home, Margaret.'

'I'm too tired to walk,' said Ivy, beginning to cry again.

'I believe your mother's coming now,' said Mr. Bent, who was looking through the window. 'That's your pony-carriage, isn't it?'

Yes, their mother had come, and the children rushed to the door to meet her.

'You will take the children back,' she said to the man who was driving. 'I shall stay here some time. Sydney, dear, you will look after Margaret and Ivy until I return, won't you?' She kissed them all, and went into the inn before the children had time to answer her, and then they found themselves driving rapidly towards home.

It was a dreadful evening. The three children sat together at the dining-room window, from which they had a good view of the main road, and they watched eagerly for any one coming with news of Miss Lane.

At last they saw Mr. Bent walking quickly down the road, and he was soon at their door. Mary, the housemaid, ran to the gate, but Mr. Bent had not time for more than a few words with her when Sydney came out.

'It's all right,' said Mr. Bent; 'your mother has sent me to say that of course Miss Lane feels pretty weak yet, and she must stay at my place all night, and your mother will stay with her; then to-morrow she may come here in a carriage, perhaps.'

Sydney could not answer for joy, but he ran back instantly to tell his sisters.

'She's bad enough,' said Mr. Bent to Mary, when the boy had gone; 'it will be a long job. Doctor says she will have to be kept quiet for weeks to come, he expects. You have got to keep the children out of her way; she must see no one but the mistress and those that help her.'

'Well, I am sorry,' said Mary; 'I was right-down fond of Miss Lane. It is a business, to be sure.'

'Mrs. Leigh says you are not to tell the children she is very bad, if you please,' Mr. Bent went on, 'and the pony-carriage must go at once to fetch your mistress to take her to the station to meet the master. He's expected soon, but she will just explain things to him, and come back to my house again.'

'I declare I'd forgot all about Master, and so has

Emma!' exclaimed Mary, 'and there's no dinner cooked for him! What a day it has been, to be sure!'

* * * * *

Miss Lane was leaning back in an arm-chair near the drawing-room window, and Sydney sat on a stool at her side. He felt important, for he had been left in charge for the whole day. His mother was out, called away to say 'good-bye' to a friend going abroad, and she had asked Sydney to wait upon Miss Lane, and do any errands that she required. Sydney felt very happy now, but he had passed through a miserable time during Miss Lane's illness.

When she arrived with Mrs. Leigh from the inn she was in a very low condition. The shock of the accident had upset her nervous system, and she could not bear to see any one except Mrs. Leigh and the servant who waited on her.

Margaret and Ivy went on a visit to an aunt, and Sydney was left at home without companions. How he reproached himself now for his rude behaviour to Miss Lane; how he wished he could see her just once, to tell her with his own lips that he hoped she would soon be quite well. The accident seemed to him almost a retribution for his angry, thoughtless words.

Sydney's mother was distressed to find that whenever she spoke of her boy the governess flushed and seemed uneasy, and said she could not talk any more just then; but she was not altogether surprised, for though Miss Lane had said little about it, some rumour of Sydney's conduct had come to her ears.

At the end of three weeks Miss Lane came downstairs for a short time each day, but did not feel equal to seeing any one. The doctor told Mrs. Leigh she must not be anxious about this, as after what had happened such a state of nerves was to be expected for some time; but one day, rather to Mrs. Leigh's surprise, Miss Lane suddenly asked for Sydney.

'I feel much better to-day,' she said, 'and I should like him to stay with me for a little while.'

Sydney felt very shy and awkward at first, but Miss Lane got him to sit down beside her, and by degrees drew him on to talk about things that had happened since the beginning of her illness.

Mrs. Leigh had warned Sydney not to refer to the accident which had caused it, but little did she know how unlikely it was that her boy would mention it.

'It is really holiday-time once more,' Miss Lane had said, 'and afterwards you will be going to school again, Sydney. I dare say you will be very glad. You must have missed your games with the boys very much.'

Poor Sydney! deep down in his heart he was wishing that he could have another term's lessons with Miss Lane, just to show her by his altered behaviour how sorry he was for what he had done.

'After all, you will not have quite forgotten your Latin,' Miss Lane went on; then, looking up, she saw the boy's eyes full of tears, so she tried to change the subject, but it was too late; and before Sydney could think whether it would do Miss Lane harm or not, he had rushed into a passionate declaration of sorrow for past offences.

And then Miss Lane soothed and comforted him,

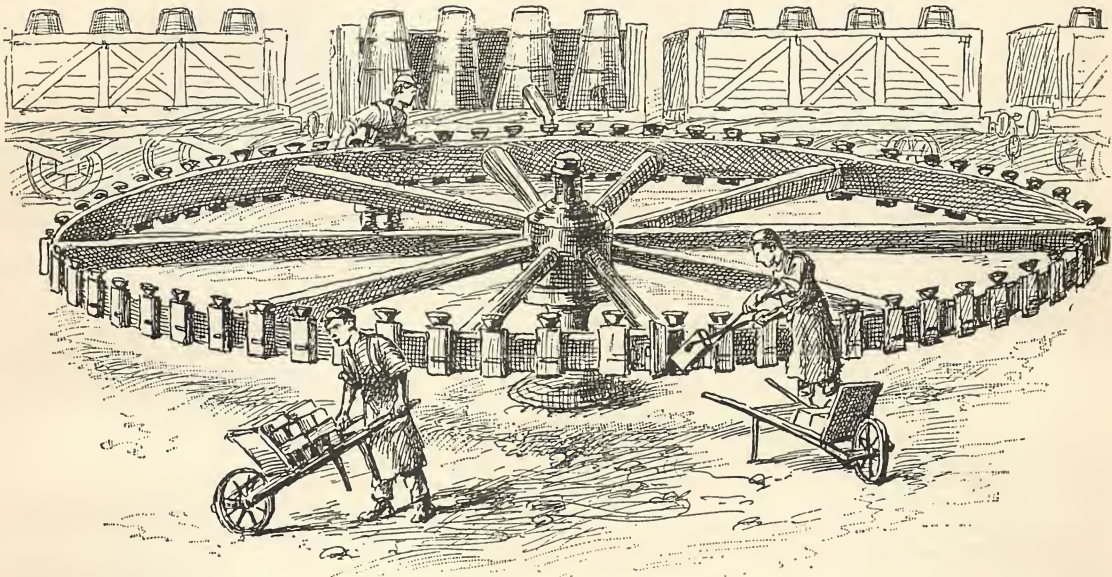


"He would soon be up to them."

and said they must not talk about that now, for they were the best of friends; and when Mrs. Leigh came to fetch Sydney away, fearing lest she had allowed him to stay too long, she found them quite merry,

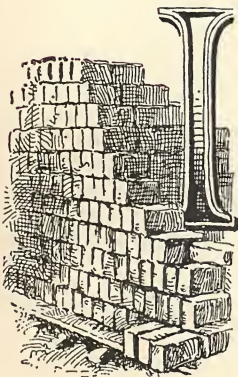
and told her boy afterwards she thought he had done Miss Lane more good than anybody; and that was the end of Sydney's contempt for governesses and their ways.

DORA DAY.



"The boy drags the bricks from the box."

SLAG BRICKS.



IN many of our northern towns you will see the crossings of the roads paved with large grey bricks, which have a dull but rather glossy surface, and are often faintly tinged with patches and streaks of blue. Round the middle or waist of each brick there is a groove which divides it into halves, and by means of this division we can see that the bricks are twice as long as their width. In order to form the pavement, the bricks

may be laid close together either upon their sides or *their ends*, and when neatly laid, they present the appearance of a path of dull, grey, common tiles. They are rather brittle, and for this reason they are not used in streets where there is much heavy traffic; but narrow back streets, causeways, and little yards are frequently paved with them.

It is a very interesting sight to see these bricks made. In order to enjoy such a sight, we must make our way to one of the great blast-furnaces where iron is being smelted. Blast-furnaces are erected in pairs, and are huge towers in which intensely hot fires are kept continually burning. Into the top of

the towers waggon-loads of coke, stony iron ore, and lime or limestone are being continually tipped; and the heat is so great that all these materials are either burnt up or melted. In this operation the iron separates from the stony part of the ore, and since all the materials left in the furnace are in a fluid condition, and the melted iron is the heaviest of them, it flows to the bottom of the furnace. The waste of the ore and other materials forms a kind of melted glassy stone, known as slag, which flows downwards, but, being lighter than the iron, stops when it reaches it, and floats upon the top of it. Much more slag than iron is formed, and as a great amount of heat is required to keep the slag melted, the iron-maker is glad to get rid of it from the furnace. In order to do this, he makes a hole in the side of the furnace, higher up than the melted iron reaches, and allows the slag to flow away as it is formed. If you stand by the side of a blast-furnace, you will see a little white-hot stream flowing from its side, and passing along an iron trench or gutter. This trench divides into nine or ten smaller ones, each of which conveys a little rill of slag to an iron box or can which resembles a very large milk-can. These cans stand upon railway trucks, and when they are filled the loaded truck is drawn away, and another truck bearing empty cans is run into its place.

It is from this slag, the waste of the blast-furnace, that the bricks are made. The truck of full cans is led away by a locomotive to an open space at some distance, where there is a large iron wheel, twenty or

thirty feet across, lying on its side. This wheel stands up two or three feet from the ground, and turns on an upright axle. All round the wheel there are a number of iron boxes, resembling so many cigar boxes set upright, a foot or so from each other, with their lids turned outwards. Each box is the mould for one slag brick, and, of course, its interior is just the size and shape of a brick. The lid, or door, opens and closes by means of hinges at the side, and it is fastened with an iron latch, just like an oven door. Upon the top of the box there is a wide-mouthed iron funnel, which leads to the inside.

The truck, with its load of slag-cans, is brought close up to one edge of the wheel, and an iron trench is laid from one of the cans to a point just over one of the funnels. A hole is opened in the can, and the slag, which is still liquid, runs along the trench, and through the funnel into the box. The latter is soon full, and the slag begins to run over the funnel on to the ground. A boy gives the wheel a push, and another empty box is brought to the trench, and quickly filled. Again the wheel is pushed, and another box is filled, and this goes on until the box which was first filled has been pushed round to a point opposite the trench—until, in short, the wheel has received half a turn.

And now it is time to remove the brick from this box which was first filled. All the work is done by boys, and I can assure you that when I saw them they worked and talked like grown-up men. The boy who is to remove the brick is provided with a long pair of iron tongs. Using his tongs with great skill, he knocks up the iron latch, and draws back the door of the box.

The brick is set quite firm, though it is still red-hot, and the boy seizes it by the middle with his tongs, drags it from the box, and places it on an iron barrow. Then, with a few blows of the tongs, he knocks out the slag from the funnel, clears away any fragments which fall into the box, and closes and latches the door. All this is accomplished while one box at the other side of the wheel is filling; and when that box is full, and the wheel is moved, this expert lad is ready to empty the next box which comes round to him. The empty box passes on its way, and by-and-by comes round again to its starting-place, and receives another flow of slag.

The bricks, after being taken from the boxes, are conveyed to a kiln, where they are kept hot for a day or so, after which they are allowed to cool. This baking, or annealing, as it is called, is necessary to make the bricks hard and compact. There is much waste of slag in the operations of brick-making, and many of the bricks do not set properly. But the sound bricks are very useful, and since they are made with little labour out of slag, which was formerly treated as waste, they can be sold at low prices.

W. A. ATKINSON.

SAILING CARRIAGES.

THERE was living in Kent a few years ago a young fellow who was fond of mechanical contrivances. He had an idea that he could make a sailing carriage. He got a small truck which he

thought would be suitable for the purpose, put up a mast, fitted this with sails, and started experimenting. He had to wait several days before there was enough wind. He soon found there was a difficulty in guiding his carriage past other vehicles, even on a quiet road, and he narrowly escaped being blown through a hedge into a field. The next day his carriage was overturned, and because he could not right it directly, a policeman told him he should summon him for obstructing the road. After that he decided to have nothing more to do with sailing carriages.

But they have been managed successfully, and there is less difficulty with them if they are run along a line of rails. Near Charlestown, seventy years ago, carriages propelled by sails were run upon an iron railway at a speed of from ten to fifteen miles an hour. Nearly three centuries ago, a Belgian, tutor to Prince Maurice, and a clever mathematician, constructed a carriage equipped with sails, and a rudder of special make was fitted to it. He gave this carriage to the prince, who one morning invited a number of important persons, then stopping at the Hague, to take a ride in a vehicle without horses. It happened that he was favoured by a strong south-east wind. His carriage was large enough to seat twenty-eight gentlemen; among these was the Brother to the King of Denmark, the French Ambassador, and a famous Spanish Admiral. They started from a place called Scheveningen at a very rapid speed, Prince Maurice himself acting as steersman. Crossing broad plains, in about two hours the carriage reached Pelten, having travelled over thirty miles. This was close to the sea, and the prince, to startle his friends, pretended he was going to drive the carriage into the sea, but turned it round just as it reached the waves!

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 83.)

MR. LOCKHEAD, before Marley had finished, was back on his stool, going on with his work, credulous though he was by nature. This last addition to Teddy's story was a thing he could not swallow.

'Now, you two boys run away,' said he. 'Come with your tales when I have nothing else to do, Teddy.'

'But it's true, sir,' broke out O'Brien.

'Mum—mum—mum—mum,' went Mr. Lockhead, over his correspondence, utterly ignoring everything else.

Poor Teddy! He had gained such a reputation for practical joking that, like Sloper, though he generally managed to wriggle out of the consequences of his pranks, all sorts of things that he was guiltless of were laid to his door.

'Come along,' said he to Marley, dragging him by the arm out of the paying-out office. 'This is worse than anything, Dick! No one will believe us.'

'Looks like it,' said Marley.

'You see,' said Teddy, 'I've stuffed old Lockhead

up several times with yarns, and now when I come to him with a real one, he won't believe it. I know what I'll do.'

'What?'

'I'll go to the old man—straight.'

'I'll go with you.'

'Then come along,' said Teddy, 'let's go right off.'

They went down to the saloon, off which the captain's cabin opened. Teddy knocked at the door. 'Come in,' said the voice of Captain Sprott.

He was in his shirt-sleeves, changing his coat, and the moment he saw O'Brien his little eyes twinkled in a way that always meant squalls to those who knew him. He was not sure, but he strongly suspected Teddy, the practical joker of the ship, of being the author of the Sloper business, and he meant to make some one pay for it.

'Ha! that's you, is it? Come to apologise, have you? No good. I'm going to log* you, sir—I'm going to log you.'

'Why, captain,' said Teddy, forgetting everything else, 'what have I done to be logged?'

'Done! what have you done? You dressed that animal up and sent him on my quarter-deck to make a disgrace of me, sir. Your tricks have passed a limit. First thing I find when I come aboard is you've had the impudence to swing a longshore boat up to my davits; now you send a monkey on to my quarter-deck to insult the Commissioner.'

'I declare, sir,' said Teddy, 'I had no hand, act, or part in dressing Sloper up.'

'Who did it then?'

Teddy was silent.

'There you are!' cried Captain Sprott, working himself up into a worse fury. 'You know who committed this disgraceful act and won't tell.'

'I saw Sloper being dressed up, sir; the men often dress him up for fun. They didn't do it to-day with any intention of insulting you or any one else. I saw the beast when they let him go. He sat on the deck biting at the end of his tail, and then he made a dash up the rigging. What he did afterwards, no one was accountable for.'

'Do you know who dressed him up?'

'I do, sir.'

'Then tell me his name.'

'Sir!' said Teddy.

'Tell me his name.'

'I am very sorry, Captain Sprott—'

'Do you intend to tell me his name or do you not?'

'Sir! it's not fair to ask me—'

'So you are going to instruct me in what is fair and what is not fair. Maybe you'll be giving me lessons in navigation next. Once for all, will you tell me his name?'

'I'm sorry, sir, but I can't.'

'Then leave the cabin.'

'One moment, sir.'

* To log an officer, *i.e.*, to enter his name in the log as having committed a misdeed, is the worst punishment a captain can inflict, for the log is read by the Company and the Board of Trade, and the officer's certificate is endangered.

'Leave the cabin before I call one of the quarter-masters to remove you.'

'Sir, I came to tell you some news of the greatest importance.'

Captain Sprott touched the electric bell beside his bunk. Teddy knew what that meant, and he left the cabin, followed by Dick.

'Oh, bother it all!' cried he, flying into one of his furies when they were on deck. 'If they won't even listen to me, let 'em take the consequences. And now he's sticking my name down in the log, and Roberts will be hauling me over the coals, and maybe sacking me when we get back. Hallo! there's one of the quartermasters running to old Sprott's cabin. What's up now?'

He hadn't long to wait till he saw what was up. The quartermaster came running back, and in a minute the shrill sound of the bo'sun's pipe was heard, calling all hands on deck from below and aloft.

Captain Sprott had decided upon a very unusual course of action. His dignity had been hurt, and he was now attempting to salve it.

All hands came aft to the quarter-deck, and the captain emerged from the saloon companion-way, looking very pompous and stiff, and rather absurd.

Dead silence reigned. Then the captain addressed the ship's company—officers and men.

'I am very dissatisfied with what occurred to-day. An insult has been offered to Don Alvarez. I have been insulted on my own quarter-deck. I do not know the man who dressed the monkey up in the clothes, but I have discovered that Mr. O'Brien, assistant-accountant, was accessory before the act, and I have entered Mr. O'Brien's name in the log of the ship.'

Then from amidst the cable-hands the Kipper stepped forth: 'Beg pardon, captain, Mr. O'Brien had nothing to do with it. 'Twas I toggled the monkey up, without meaning offence to you, or Don Alvarez, or anybody else.'

'That will do,' said Captain Sprott. 'I have logged Mr. O'Brien for very sufficient reasons.'

Then he went back to his cabin and the crowd dispersed.

Thus was a mole-hill made a mountain of, a young man's career endangered, and the safety of the expedition imperilled by the suppression of O'Brien's information, and all because of bad temper uncontrolled; which proves again the old truth that a man who cannot command his own temper is utterly unfit to command men.

O'Brien, when the captain had left the deck, was surrounded by the officers, who condoled with him.

'Cheer up, Teddy!' said the third officer; 'Roberts is too good a sort to take much notice of it.'

'Oh, it's not that,' said Teddy, who was bursting with rage, 'it's the disgrace. What have I done?—Nothing.'

'Sloper is the person who ought to have been logged,' said Mr. Toms. 'Buck up, Teddy! I'll testify to the matter before Roberts.'

Here the dinner-bell rang, and they all went down, with the exception of O'Brien, who could not eat, and Marley, who stayed to keep him company.

(Continued on page 98.)



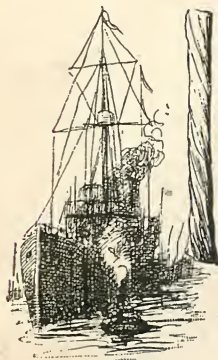
“ ‘Beg pardon, captain, Mr. O’Brien had nothing to do with it.’ ”



"A large three-pronged grapnel was being lowered."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 95.)



HEAR the captain has logged you, O'Byrne,' said Diego, the fat electrician, as he followed the rest down to dinner.

'You get out, you Dago,' shouted 'O'Byrne,' 'or I'll log you down the companion-way with the tip of my boot.'

Diego did not wait.

'It's jolly unfortunate this voyage,' said Teddy. 'That longshoreman and his boat have given the captain something to start with; then this—'

'I suppose it's useless to tell any one else about that Hippodrome business?' said Marley.

'Tell any one else?—not I! I don't want to be logged again for spreading false reports. Good gracious, Dick, you and I are in a horrible position: it's like sitting on the edge of a powder magazine that may blow up any moment, and the horrible thing is that it's so mysterious. I feel convinced in my mind that this chap Alvarez is going to play some awful game, though he is the Brazilian Commissioner—or pretends to be; but *why*, I can't say. If we had treasure on board, if he could do anything with the old ship when he'd taken her, I could understand; but there's an idea in my head that it all has something to do with the cable.'

'Why, you said the other night that the cable would be no use to any one if they stole it.'

'I don't mean the cable in our tanks—I mean the cable in the sea—the cable we are going to mend.'

'How's that?'

'I don't know; it's just an idea, that's all. Anyhow, time will tell.'

That night they spent a good deal of time in talking; they felt, as Teddy put it, just as though they were sitting on a powder magazine that might explode any moment; and but for the antics of that wretched Sloper, they might have had a chance of warning the captain!

CHAPTER XI.—THE SECOND MYSTERY.

WHEN a cable is laid, the hydrographers who accompany the ship draw the exact course of the cable on a chart of the sea; when by accident it is broken in any part, electricians can tell, by a method devised by Lord Kelvin, exactly how far from land the break is. Having thus, so to speak, the latitude and longitude of the break, a ship can be brought almost to the exact spot.

What has to be done then is to lower a grapnel—a thing like an enormous three-pronged fish-hook—till it reaches the bottom of the sea, and drag it along slowly across the line of the cable till one of the broken ends is seized; this is hauled on board, tied to a buoy, and the whole lot thrown overboard

again. Then the other broken end has to be fished for and seized; this is brought on board and spliced on to the cable carried in the cable tanks; then the ship turns slowly, and paying the cable out as she goes, makes for the first buoy, picks it up, drags it and its attached cable on board, and splices the attached cable on to that which she has been paying out. The thing is now mended: a new piece has been let into it between the broken ends, and the cable is hove overboard and the work is done.

Cables are broken in various ways: sharp rocks sometimes do the business, and do it very neatly when there is a strong current to work the cable against them. Fish are said sometimes to attack cables. I have seen a cable brought up from the English Channel that had been cut with the strokes of an axe. It had evidently been entangled in some fishermen's trawl-net, and the fishermen, unable to disentangle it, or in a rage, had cut it. There were half-a-dozen axe-strokes, and every stroke cost the cable company a hundred pounds, for the cost of the mending amounted to over six hundred.

One morning, some days after they had left Gibraltar, Dick Marley was awakened by a wet sponge being dabbed in his face.

'Tumble out, you lazy fellow,' cried Teddy, who was standing beside him, sponge in hand. 'It's eight, and they've been working since six; we've got the mark-buoys down and everything is ready for a start.'

Dick tumbled out, made for the bathroom, tubbed, dressed himself, and came on deck. It was a beautiful morning; the sea lay smooth and blue, and solid-looking as a sapphire. To starboard, some distance away, lay the island of Gommera, its high, volcanic cliffs taking a purple tinge from contrast with the intense blue of the ocean; beyond Gommera lay the island of Heiro, like a cloud on the sea.

Southward the vast cone of Teneriffe stood up in the sky fifty miles away, yet seeming scarcely twenty. Somewhere at the bottom of the sea just here the broken Brazilian cable lay, a thing not thicker than an ordinary rope, and it seemed to Marley a hopeless task indeed to try and find it in such an expanse of ocean, especially here, where the water was a mile deep.

'Do you see those buoys?' asked O'Brien, pointing to two red buoys floating on the water a mile apart, and each decked with the pretty blue, white, and red telegraph flag. 'They are anchored each with a mile of rope and a mushroom anchor. Somewhere between them lies the cable. We've got now to lower the grapnel to the bottom, and drag it along from buoy to buoy till we catch the cable. Come forward, and let's see them at work.'

In the bow stood Mr. Toms, directing operations. A large three-pronged grapnel was being lowered over the bows. It was attached to a rope, which was unwound from the great drum of the picking-up gear. Marley saw the grapnel splash into the blue water, and heard the clanking of the drum as it revolved, paying out the rope rapidly. Ten minutes went by, and still the rope was being paid out.

'A mile of rope takes some time to lower,' said Teddy, 'and the sea is a mile deep here. Do you see that jiggling thing the rope passes under before it

leaves the bows—that's the dynamometer. It tells the weight of the rope and the strain upon it.'

Half an hour passed by, and still the rope was being lowered. Then Mr. Toms, who stood with his eye on the dynamometer, at last raised his hand. The drum ceased revolving, for the grapnel had reached the bottom. Then he shouted an order, and the ship, which had been stationery, began to move slowly, at about three knots an hour, steaming in the direction of the buoys.

'We are dragging the grapnel along the bottom now,' said Teddy. 'It's very rocky and rough just here, is the bottom of the sea, and look at the old dynamometer the way the index is jumping up and down. Every jump means a rock that the grapnel claws hold of, or a great tuft of seaweed. We will go on steaming like this till we get half a mile beyond the farthest buoy. If we don't catch the cable the ship will be turned, and back we will steam on the same course, and so on backwards and forwards, backwards and forwards, till we *do* catch the cable, which may be to-day, or may be to-morrow, for the old grapnel may go over the thing a score of times without getting a grip of it.'

'How do you know when the thing is caught?'

'Several ways; for one, the index of the dynamometer begins to rise slowly and steadily, showing a slow and steady strain on the rope, and there is nothing gives that *but* cable. When that happens they stop the ship, and start the old drum going, and wind up the grapnel. But, come on, there's the breakfast bell. Let's leave them to their work. I'm hungry.'

(Continued on page 110.)

LEFT AT TENERIFFE.

WHEN Nelson returned to England after the glorious victory of the Nile, he landed at Yarmouth. He was a Norfolk man, and the populace, frantic with enthusiasm for their hero, dragged his carriage to the place where he was to be presented with the freedom of the borough.

In taking the oath, Nelson placed his left hand upon the book.

'My lord,' said the town clerk, officiously, 'your right hand!'

'I left that at Teneriffe,' said the Admiral, quietly.

NEGLIGENCE.

ONCE upon a time a large vessel laden with cotton, and bearing a crowd of passengers, started from New Orleans. A slight shower of rain fell upon some of the cotton bales while the cargo was being taken on board, and these, before stowing, should have been carefully dried.

But the captain was careless, the packers were in a hurry, and these bales were fastened down undried.

The first part of the voyage glided pleasantly by; then, far out upon the ocean, the ship was found to be on fire. What a scene of terror and agony! Boats were lowered. The captain and officers strove to maintain order, but the roaring flames enveloped

the doomed vessel so rapidly that very few of those on board escaped.

The damp cotton, tightly stowed under hatches, had become heated, and at last began to burn so fiercely that it could not be put out—all because of a little negligence.

A BIRD'S FEATHER.

THOUGH most of us are ready enough to take trouble to inspect new treasures which some enterprising discoverer may have brought to light, few of us realise that some of the greatest marvels are to be found in every-day objects. Surely there are few things more common than feathers; they are so common, indeed, that probably nine people out of ten would find it difficult to believe that anything interesting could possibly be said about them.

Now, in the first place, a feather is a wonderful thing, if only because it is a structure absolutely peculiar to birds. It is, so to speak, the 'hall-mark' of a bird, no other creature under heaven being clothed with feathers. But it becomes still more wonderful and marvellous when we examine it carefully. Take one of the long quill-feathers of a bird's wing, such as that from the Argus Pheasant, shown in fig. 1, and in the diagram in fig. 2, and note the number of parts of which it is made up. Firstly, you will note the long, slightly curved central axis or stem (fig. 2), and next, that from the tip of this stem backwards to beyond its middle, there runs down either side a broad, elastic fringe—elastic not in the sense of stretching, but in its capability of being bent. This done, you will see that from the point where the fringe leaves off to the end of the feather the stem loses its square, solid appearance, and becomes more or less transparent and round: this part, then, is known as the quill or barrel. If you take a sharp knife and split the whole stem, you will find that the fringe-bearing part is solid, while the quill is hollow, and encloses a number of delicate, transparent cases fitting one into the other. While the feather was growing, these little cases contained the nutritive matter with which the whole feather was built up.

Try now to pull this web apart with the fingers very gently: you will then find that a certain amount of force is required. Take a lens and examine this fringe. At once it becomes apparent that it is not a web felted together, but is made up of hundreds of slender, tapering rods, known as barbs, placed very close one to another, much as in the part of the diagram (fig. 2) enclosed within the small circle, which is further enlarged in the larger circle fig. 2A, and held together in some mysterious way. To find out the cause of this, a really powerful microscope is necessary, as well as some very delicate dissections. But a great deal can be done with a sharp knife, wherewith some of the rods, or 'barbs,' can be cut off from their attachment to the shaft and pulled apart. It will then be seen that each of these close-fitting rods bears a fringe, very like that which is borne by the stem itself. This fringe is formed by hundreds of little horny plates, a row on each side of the rod or barb (fig. 2A). These, which

in the undisturbed feather pointed towards its tip, differ in a very wonderful way from those which point towards the base of the feather. What these differences are we shall show presently, but for the moment we will only note that these smaller rods, which you tried to pull apart, are known as barbs, while the microscopic fringe which they support is formed by the 'barbules' (fig. 2A). The barbules to which we just referred as pointing towards the tip of the feather are, you will find, when magnified, made up of two parts, a ribbon-like blade, slightly curled, and a series of long, delicate hooks (fig. 3). But those barbules which look towards the base of the feather have a totally different shape (fig. 4). For the greater part of their length they are scroll-like, but they end in a fine point, curved sharply (fig. 4). If you could succeed in placing a section through two or three of these barbs under the microscope (a bit of two barbs from between the two parallel lines A B in fig. 2A, for instance), the meaning of these differences between the barbules would become plain, for you would see that the long hooklets of the one series were thrust down so as to catch hold of the scroll-like barbules of the hinder

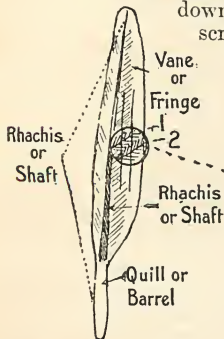


Fig. 2.—Diagram of Argus Pheasant's Feather.

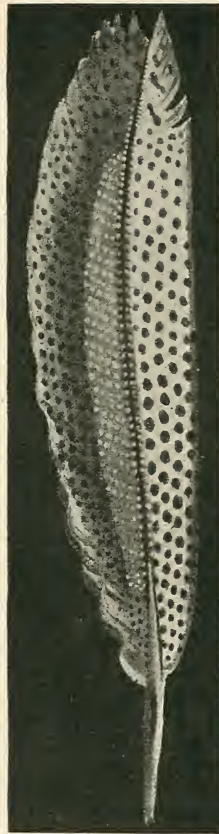


Fig. 1.—Feather of Argus Pheasant.

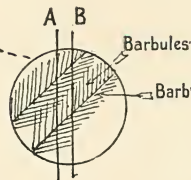


Fig. 2A.—Enlarged portion of diagram.

series, as in fig. 5. In such a section the scroll-shaped barbules are always cut across, as you see in the fig. 5. If the section were taken so as to keep

the scroll-shaped barbules whole, the hooklet barbules would be cut across. A reference to the diagram in fig. 2A will make this clear. Complicated though this description may seem, it will become plain enough if you read this over and compare it, step

by step, with the illustrations.

But for this beautiful system of interlocking the barbs one to another, the quill feathers would be



Fig. 3.—Upper Barbule of Feather (very highly magnified).

useless for the purposes of flight.

The feathers which clothe the rest of the body are not quite so perfect in this method of interlocking; indeed, very often the hooklets are not developed sufficiently well to keep the barbs locked together, when a loose, almost hairy-looking plumage is the result. The beautiful ostrich and marabou (fig. 6) plumes, worn in the hats of thoughtless women, owe their elegance to this failure on the part of the hooklets to form a continuous web.

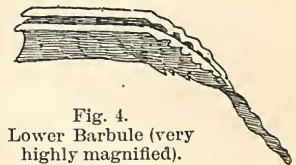


Fig. 4.
Lower Barbule (very highly magnified).

But besides the feathers such as meet the eye in the living bird, there are feathers of other kinds which can only be seen when the larger feathers are raised up. The most important of these are known as down-feathers (fig. 7). They form a thick under-clothing answering to the under-fur of such mammals as the fur-seals. Under the microscope one of these

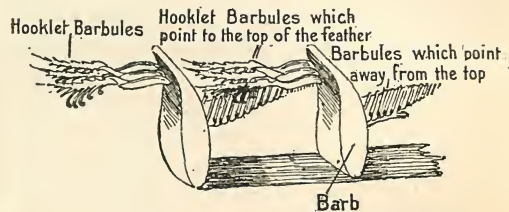


Fig. 5.—Section of figure, showing arrangement of upper and lower barbules (highly magnified).

down-feathers will be seen to differ in some important respects from the quill-feathers we have just examined. In the first place, the barbs all spring from a common base, and are not ranged along each side of a central shaft. Further, no 'vane' or 'fringe' is present, the barbs instead forming loose threads, while hooklets are represented only by minute 'prickles,' as it were.

But there are yet three other kinds of feathers to be examined. The first are known as filo-plumes. What they are like can best be seen by a visit to the kitchen just after a chicken has been plucked for the table. If this be examined near the light, it

will be found to be sparsely covered with very long and very delicate hair-like threads—the 'filo-plumes.' The second kind of feather is that



Fig. 6.—Marabou Feather.

known as a powder-down feather. These are found only in birds like the stately heron, and its cousin the bittern, for example, when they form large patches down the breast and over the leg, and in some hawks and parrots. They are remarkable because they are continually falling to pieces in the shape of an extremely fine powder, and it is to this powder that the peculiar bloom of the face and beak of the grey parrot is due.



Fig. 7.—Down-feather.

they leave the egg are absolutely bare, and very black and ugly they are in consequence. Young owls (fig. 8), on the other hand, serve as good examples of downy nestlings, being clothed in a wonderful suit of 'fluff.' But the down of ducks and fowls is of a much more feather-like character, and answers to a form of plumage such as was worn by birds long since extinct. This much we gather, not only because of its structure, but also because of the fact that it is marked by broad stripes, forming dark bands in a light ground. These stripes are even more plainly marked in the young of the ostrich tribe, such as is seen in the picture of a young

cassowary (fig. 9). Look at it well, and remember how important a lesson these stripes teach the next time you see a brood of young chickens, or, better



Fig. 8.—Young Short-eared Owl.

still, young pheasants. Compare them with this young cassowary. The fact that young chickens are so often whole-coloured—white or black—is due to the fact that chickens have so long been kept as



Fig. 9.—Young Cassowary.

domesticated that they have lost much of their wild character. The young of the jungle-fowl, from which our tame fowls are descended, are striped like young pheasants or young cassowaries.

W. P. PYCRAFT, F.Z.S., A.L.S.

AN UNSUCCESSFUL CHASE.

A LARK was aloft in the evening sky
Singing 'Good-night' to the passers-by,
When quite by chance he happened to spy

A tortoiseshell cat in the waving hay,
Slowly, cunningly making her way
To the place where she thought his little nest lay.

'I shall easily find it,' she purred, 'for hark!
I hear on high the song of the lark,
And I'll watch him drop to his nest at dark.

'Then won't I feast on the little larks three—
Or there might be four,' she whispered with glee,
'All only hatched as a supper for me!'

But the lark soon guessed what she meant to do;
Away from his nest he quickly flew,
To wait and sing till she came in view.

Then down he dropped and hid in the hay,
Till the tortoiseshell cat came creeping his way,
And he thought it safer to go than to stay.

So up and down for an hour or more,
Stopping to wait for the stealthy paw,
Farther he flew each time than before;

And the cat never knew that the lark had seen
Her cunning crawl through the waving green,
Till he shouted down from the sky serene:

'Oh! tortoiseshell cat! good-day, good-day!
To watch you wander I must not stay,
For my nest is nearly a mile away!'

Then he flapped his wings and lifted his crest,
And off he flew to his own wee nest,
Where his wife had cuddled the babies to rest.

And the angry cat, as she slunk away,
Vowed she would make the little lark pay
For the cunning trick he had dared to play.

* * * * *

But she never did, I am happy to say.

A. KATHARINE PARKES.

FEATHERED FRIENDS THAT STAY.

I.—THE SKY-LARK.

OF all the birds that help to make the world bright and happy, perhaps the Sky-lark should have the first place. As people grow older and understand how much sadness there is around them, they understand why hope is so dear to all our hearts, and the reason is that every one hopes for happiness, and the very hoping keeps us happy. Hope is the emblem of everything bright and sunny, and this is why a merry child, a playful kitten, or a soaring sky-lark is so attractive. A person must be determined to be miserable who does not find the world brighter after watching a sky-lark mount into the air, carolling

his enchanting song. Higher and higher he goes, seemingly into the very clouds, whilst his melody floats down through the air to where his wife and babies listen amongst the dewy grass.

Sky-larks are as common as they are joyous, and go where we will, from Cornwall to the Shetland Islands, on any piece of open ground free from woodlands, we may expect to hear their cheerful voices.

They may be running along the ground, for sky-larks are as good at using their legs as their wings; or in spring-time we might watch Mr. Sky-lark with depressed wings and raised crest and tail, hopping solemnly round the lady he proposes to make his wife; but we must remember that on all other occasions these birds walk or run, never hop.

If they see their way to make a choice, sky-larks prefer high lands, where they will stay all the winter in sociable fashion in large flocks. When March comes the birds scatter and pair, although they seldom begin to nest before the middle of April. Their house is rather roughly put together and deposited either in a depression of the ground or hidden amongst long grass. There is a tale of a mother sky-lark which, when the crop had been mown which concealed her habitation, took the trouble to carry grasses, straw, and such-like, to make an artificial shelter to hide her babies.

Mrs. Sky-lark sits very close on her three, four, or five eggs of a dull white colour marked with olive brown. While she is sitting, her husband does his best to enliven the poor lady, as well as to express his own proud hopes for his coming family, ceaselessly singing his sweetest and tenderest love-song, soaring into the air above the nest, or perched upon some neighbouring hummock. This happens twice in the year, for sky-larks have two broods, one usually able to fly in June, the other in August.

Mr. Kearton, in his fascinating book, *Our Bird Friends*, describes a sky-lark's care of her children during a thunder-storm. As soon as the rain began she hurried home, dropped her beakful of caterpillars in the little yawning mouths, and settled down, spreading her wings over the edges of the nest so that the rain may run outside, and the interior and its occupants might be kept dry. There the brave little creature sat all through lightning, thunder, and rain, keeping perfectly still, excepting once in a way she would open her bill to sip off the water which streamed down it, or to close her eyes tighter to keep out the raindrops. Directly the storm was over she rose, looking like a drowned rat, but in a quarter of an hour home she came again bringing a fine supply of food, and looking as dry and unruffled as before the storm.

This power of shaking off wet is one of the most curious features of bird-life. If the feathers absorbed wet, as do our clothes, each storm of rain would mean death to countless feathered creatures, as they would not only die of chill, but the weight of the moisture would so increase their own weight, that they would be unable to fly, and be at the mercy of cats, dogs, and other enemies. Happily the great Father of all living things knows how to

take care of the creatures He has made, and each bird is supplied with a coat of oily varnish, constantly renewed, off which water runs, without penetrating through the feathers to the skin. If you took up a live duck out of water, you would find its body perfectly warm and dry, but if it were dead you would find it cold and saturated with water. It seems as if the very life, which is retained by the protecting gloss, itself generated the gloss.

Sky-larks are very fond of taking dust-baths, and may often be seen rolling in roads or on sandy commons, shaking their wings in great enjoyment.

Their food is largely seeds of various troublesome weeds, and so they are of great use to agriculturists, besides which they destroy immense numbers of grubs and small insects. In winter they live on berries, and it is their custom to stay in one particular field or common unless a heavy snow-storm drives them away. At this time they keep company with flocks of different species: buntings, linnets, red-poles, and others.

Besides their actual song, sky-larks, have a pretty liquid call-note, which cannot be imitated, but sounds as if produced from a whistle half full of water.

HELENA HEATH.

BIG CABBAGES.

EVERYBODY knows the cabbage as we see the plant commonly growing in gardens and fields, but we may go to places where it looks very different, and is much broader or taller in its growth. Even in the time of the old Roman, Pliny, some cabbages were noticed of remarkable size; he describes one kind at Aricia having curled leaves, a small stem, and an immense head. Perhaps this may have been what we now call the cauliflower. In some parts of France there grows a large cabbage known as the cow-cabbage, because the peasants use the lower leaves to feed their cows. It is one of the sights which surprise the tourist in Jersey, where it also thrives, a common height for this cabbage being six feet or even more, so that a cabbage-garden looks rather like a grove of young palm-trees. The stouter stalks are found serviceable as cross-spars for the roofs of houses and barns, and the smaller ones make walking-sticks, which visitors buy to carry home in memory of a pleasant holiday in the Channel Islands. Italian cabbages are frequently of an enormous size and weight. Even England can boast of some fine specimens; we read of one produced at Fakenham, in Norfolk, the heart of which, stripped of the outer leaves, weighed twelve pounds and a half; this cabbage covered a piece of ground nearly four feet across. On some volcanic islands in the Southern Ocean, large, but rather coarse, cabbages grow wild; they are much enjoyed by sailors who have been without green food for a time. Plentiful as cabbages are in Britain now, centuries ago the chief supply of them came from Holland. Some of these were put to a funny use: people tucked letters amongst the leaves instead of sending them by the post, which was then expensive.

BRAVE CARLO.

Founded on Fact.

LUCY lived in a suburb of London. Her mother was a very busy woman, and often sent Lucy out into the park near them in charge of her baby sister. The baby was a tiny mite, with dimples and a sunny smile, and Lucy was very proud when she wheeled her about in her perambulator.

One day Lucy was sitting on a seat on the bank of a pond in the park. The pond was rather deep, and the sides were not railed in. As Lucy sat there, softly talking to the baby, whose head was beginning to nod with sleepiness, another little girl who went to school with her, and whose name was Mabel, ran up. She had a big black retriever dog with her, whose name was Carlo.

'Come along, Lucy,' cried Mabel; 'let us have a game of ball on the grass.'

Lucy looked at the baby. Yes, her eyes were closing.

'Wait a minute, Mabel,' she said, 'until Baby is asleep; then I will come.'

At the bottom of her heart Lucy thought that perhaps Mother would not quite like it if she left the baby, but she stifled the doubt, and ran off with Mabel when her little sister was safely asleep, thinking that she could keep an eye on the perambulator.

They had a fine game of ball, which Carlo seemed to enjoy, for he gambolled round them, barking short, joyous barks. Lucy was so absorbed that she forgot how the time was going, when, in the middle of a fine toss, she remembered the baby, and ran to see how she was getting on. Carlo ran by her side.

Suddenly, just as they neared the pond, there was a splash, and Lucy gave a cry of horror. The perambulator had been slipping down the slightly sloping bank, and just as Lucy came in sight it disappeared into the water, Baby and all!

'Oh!' screamed Lucy. 'Oh! what shall I do? what shall I do?'

Before she could move, something dashed past her, and with a bound Carlo sprang into the water and swam towards the drowning baby. He caught her by her clothes, and, swimming slowly and carefully back towards the land, laid her dripping and unconscious at Lucy's feet.

By this time a crowd had gathered, and some one took off Baby's wet clothes, and, wrapping her in a warm shawl, bade Lucy run home with her as soon as possible, which she did.

Carlo, after looking proudly round, saw the pillow belonging to the perambulator floating in the water, and plunged in a second time, under the impression that it was another baby. After bringing *that* to land, he shook himself, and walked off beside his little mistress, Mabel.

Lucy's mother and several other people got up a subscription, and presented Carlo with a beautiful silver collar with the words 'For Bravery and Intelligence' engraved on it.

He wears it to this day, and is as proud and happy a dog as you may see anywhere.



“Carlo laid the baby, dripping and unconscious, at Lucy’s feet.”



“Lifting the heavy girdle, she struck the beast full on the head.”

THE GOOD-WIFE AND THE WOLF.

WE are so accustomed to think of the days of wolves in Great Britain as belonging to very early history, that it is a surprise to find how long these fierce beasts lingered among the fir-woods and mountain fastnesses of the North. Evan Dhu, the great chieftain of the Camerons, who fought under Montrose and Dundee, was believed to have killed the last wolf in Scotland; but in even more recent years there were stories of stray beasts slain by some of the mighty hunters of the Highlands, and of one killed by a woman.

A certain good-wife of Strathglas had bannocks to bake, and went on a cold winter's day to borrow a girdle, the round iron plate upon which the Scottish country-folk make scones over the fire. On the way home she fell in with a neighbour, and the two stopped for a chat, seating themselves on a heap of loose stones, and quite unconscious that the place they had chosen was the refuge of a wolf, rendered hungry and savage by the hard weather. Their talk was suddenly interrupted by a scrambling among the stones, and the head of the beast, with fierce eyes and threatening jaws, emerged close beside them. Another moment, and the wolf would have been free of the rocks and ready to spring upon its prey; but the stout-hearted Highland woman was equal to the occasion. She had her weapon of defence, the heavy girdle, and, lifting it with strong arm and unerring aim, she struck the beast full on the head, battering the life out of it by her vigorous blows, and returning triumphant to bake the bannocks, with a fine tale to tell around the glowing peat fire.

TOO DILATORY.

SIR THOMAS LAWRENCE, the great portrait painter, was often a very long time over his pictures.

He was once engaged to paint a portrait of Lady Mexborough and her little boy, but year after year slipped by, and still the picture was not sent home.

At last Lord Mexborough told Sir Thomas he would wait no longer, but *must* have the picture sent to him without further delay.

'I know I have been rather long over it,' said the painter, apologetically. 'Lady Mexborough is, however finished, but if the baby could be brought to me for one more sitting, I really will finish the picture.'

'I am afraid that is impossible,' said Lord Mexborough, 'for *the baby is in the Guards!*'

THIRTY POSTS TO THE MILE.

IT may interest some people to know that telegraph posts are almost invariably thirty to the mile, so that by counting the posts on a long walk you may know pretty accurately how far you have come. If the road should be very winding and tortuous, a few extra poles are added; but along an ordinary road thirty posts to the mile will be found an almost unerring rule.

PUZZLERS FOR WISE HEADS.

6.—DIAMOND.

1. Part of care.
2. Half of a letter.
3. A division of time.
4. Another division of time.
5. Hurled.
6. To call out.
7. Part of a bicycle.

R. M. B.

7.—RIDDLE.

Why is a gardener the most extraordinary man in the world?

[Answers on page 147.]

E. D.

ANSWERS TO PUZZLES ON PAGE 74.

4.—1. H O M E	2. I R I S	3. R I N G
O V A L	R E S T	I D E A
M A S S	I S L E	N E X T
E L S E	S T E P	G A T E

5.—Latin.

Tail tan tin lit nil lait (milk).

SOME FAMOUS CASTLES AND PALACES.

II.—BROUGHAM CASTLE.

IT is rather amusing to hear that sometimes there are several ways in which a word of only two syllables may be pronounced. We all know the usual way in which Brougham is pronounced; it is the name of a ruined castle, and also that of a famous Lord Chancellor. He was much talked about, but some folks called him Lord 'Broom,' and others, it is said, made the name 'Bruffam.' But when we look into old books, we find the first name of the castle was Burgham, occasionally shortened to Burgh, and it belonged to a Saxon family of the same name.

Long before the Saxons had it, there was a Roman station, for the castle stands on the military road to Carlisle. Many relics of the Romans have been dug up, and the site of a camp has been traced. Probably they built it for a defence against the border tribes, for evidently fierce battles were fought in this part of Westmoreland. Nearly all the oldest part of the castle has long vanished, though some remains of the Saxon builders' work. An old print shows sheep quietly grazing in the open space round the castle, which once resounded with the shouts of angry men and the clatter of weapons.

Brougham Castle was defended at the chief gate by a tower and portcullis; on the river side were three square towers; the principal tower was in the middle, having turrets at each corner, with galleries. The lower room of this tower was partly underground, with a stone roof of eight arches, and much ancient carving about the walls. Some think this was a prison, but more likely it was a retreat during a siege for the principal persons living at the castle. Evidently the Normans, when they got possession, made the place stronger, for William the Conqueror, who took so much of the Saxon property to give to his followers, put Robert Vipont in possession of

Brougham. Centuries passed, and then appeared one Roger, Lord Clifford, who married into the Vipont family, and he spent a large sum of money on the old castle, almost rebuilding it, putting up a record over the inner door, 'This made Roger.' He had a grandson who made other improvements, and put up on the walls his crest and that of his wife. But after this the castle was much damaged by the Scots. However, it was so far repaired that a grand reception was given there to King James I. from August 6th to 8th in 1617, on his return from his last visit to Scotland, by Lord Clifford, afterwards Earl of Cumberland. Still later, a famous lady, who wrote an account of her own life, the Lady Anne Clifford, Countess of Pembroke, has told how she repaired Brougham Castle while Cromwell was Lord Protector. Towards the end of the seventeenth century the place was neglected, and at the beginning of the reign of George I. the choice woodwork, stone carvings, and lead were taken away and sold. The greater part of the building remained, but gradually became a ruin.

INSTEAD OF THE SUN.

IV.—LAMPS AND CANDLES.

THE lamps which we use in England are made of metal, earthenware, and glass, and they are often very beautiful and costly. They are made in many shapes, and nearly all of them have some wheels, slides, and catches for various purposes, which give us the impression that lamps are rather complicated things. But if we look round into other countries, we shall soon find that useful lamps may be made in very simple ways. A farmer in the Australian bush had a lamp which was simply a tin cup filled with tallow, in which a piece of rag, torn from a pair of old corduroy trousers, was stuck for a wick. The loose end of the rag leaned over the cup-edge, and was lighted like a little piece of resinous torch. The heat of the flame melted the tallow in the tin, and the rag sucked it up, as it were, to the flame, where it was burned. Our best lamps do the same thing in a very similar way, and all their complications are simply added in order to get a better light, to prevent smoke and dirt, and to reduce the risk of accidents from the spilling or the firing of the oil which is used in the lamp.

Any vessel which will not take fire, and will hold tallow or oil, may serve for the bowl of a lamp, and almost anything which is fibrous, soft, and spongy will do for a wick. In the Malay Islands large shells and rush wicks are used. The lamps in the temples of Thibet are simply brass bowls with wicks projecting from them. They are placed upon the floor, and they are not filled with tallow or oil, but with melted butter. The Thibetans keep large flocks and herds, and milk and butter are very plentiful—so plentiful, in fact, that butter is the cheapest kind of lamp oil in the country. The lamps of the temples in Armenia are shallow iron bowls fed with oil. Some of them have four little lips, like the lips of our jugs, and in each of them there is a wick, so that the lamp has four lights. It is set up on an iron rod driven into the ground.

The Eskimos have stone lamps—that is to say, the bowls are made out of hollowed stones. These inhabitants of Arctic lands burn the oil which they obtain from the blubber of the whale and the fat of the seal and other animals. Some of the races of Africa make lamps of baked clay or earthenware, some of which have a tall stem, and look rather like our candlesticks. The lamps of Morocco, which are made of both earthenware and brass, are very peculiar. They have a tall stem standing up like a pillar in the middle of a flat dish, and at the top of the stem there is a small, beak-like cup, which holds the oil and the wick. A long handle reaches from the bowl to the dish, and the lamp is sometimes over two feet tall.

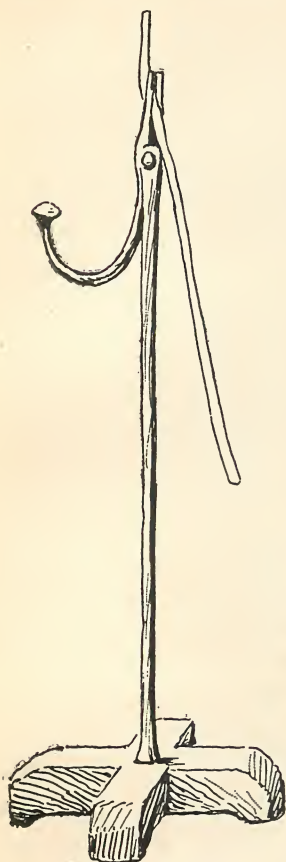
In most of our museums there are lamps which were used by the Greeks and Romans in ancient times. They are all dishes or cups for holding oil and wicks, and are quite as simple in construction as most of those which I have described, though their forms are much more beautiful. Many of them are shaped like our sauce-boats, and the wick rests in the hollow of the lips. They were sometimes placed upon pedestals or brackets, and sometimes suspended by chains from the ceiling.

Lamps of a rather similar kind were used in England, Scotland, and Ireland in bygone times, and from them our modern lamps have been developed. Many kinds of oil obtained from the fats of animals and from plants have been used, but now the commonest oil for lamps is a mineral oil, which is pumped out of the earth in various parts of the world, and afterwards purified. One of the greatest improvements in lamps has been the addition of a chimney of glass, which draws a better supply of air to the flame, and makes it burn more brightly and with less smoke.

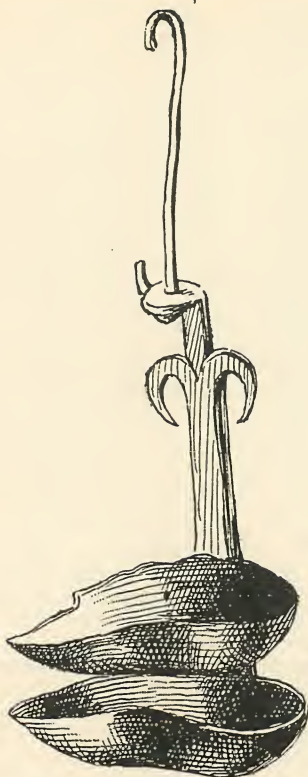
If we took the lamp of the Australian farmer, and cut out the stiff tallow with the wick sticking in it, we should have something rather like a candle. We could light the wick just as if it were still in the tin cup, and it would burn just as well. The only difference in the end would be that the tallow, as it softened, would run over the table or the floor, and be wasted. Still, we should have a sort of candle, and the waste could be prevented to some extent in various ways. Thus, if we made the candle very long and thin it would only melt a little at a time, and would burn up almost as quickly as it melted, as we see when we burn a wax taper.

Our ancestors made candles of this kind in their own homes. They chose the pith of a common rush growing in moist meadows for the wick, and after certain preparations they dipped the rush in melted bacon fat, or some other kind of grease. The candles, or rushlights as they were called, were two feet or more long, and a good one would burn for about an hour. Tallow candles were made in a similar way, by dipping wicks of twisted cotton into melted tallow. They were shorter and stouter than the rushlights, and much of the tallow was wasted when they were burned.

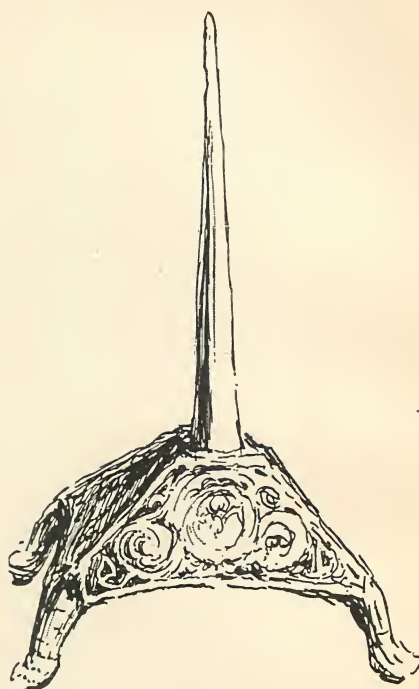
It was noticed by those who made rushlights that if they took a little wax from their beehives, and mixed it with the grease, their rushlights were greatly improved. They were stronger, the tallow did not melt so quickly, and the rushes burned for a



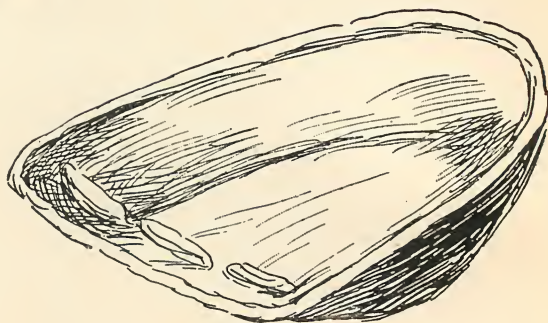
Rushlight in Holder.



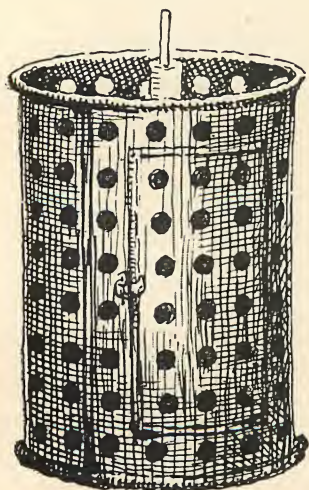
Scotch "Cousie."



Pricket Candlestick (12th century).



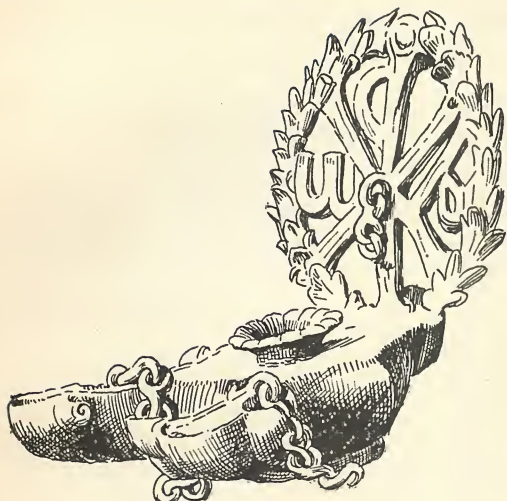
Esquimaux Stone Lamp.



Night-light Lamp.



Early Roman-British Lamp.



Early Christian Lamp.

longer time. This, then, was another way of preventing the grease of a candle running to waste ; and by carefully trying different kinds of oil and wax, and preparing them in suitable ways, our candle-makers now produce candles which give a good light and burn very clearly.

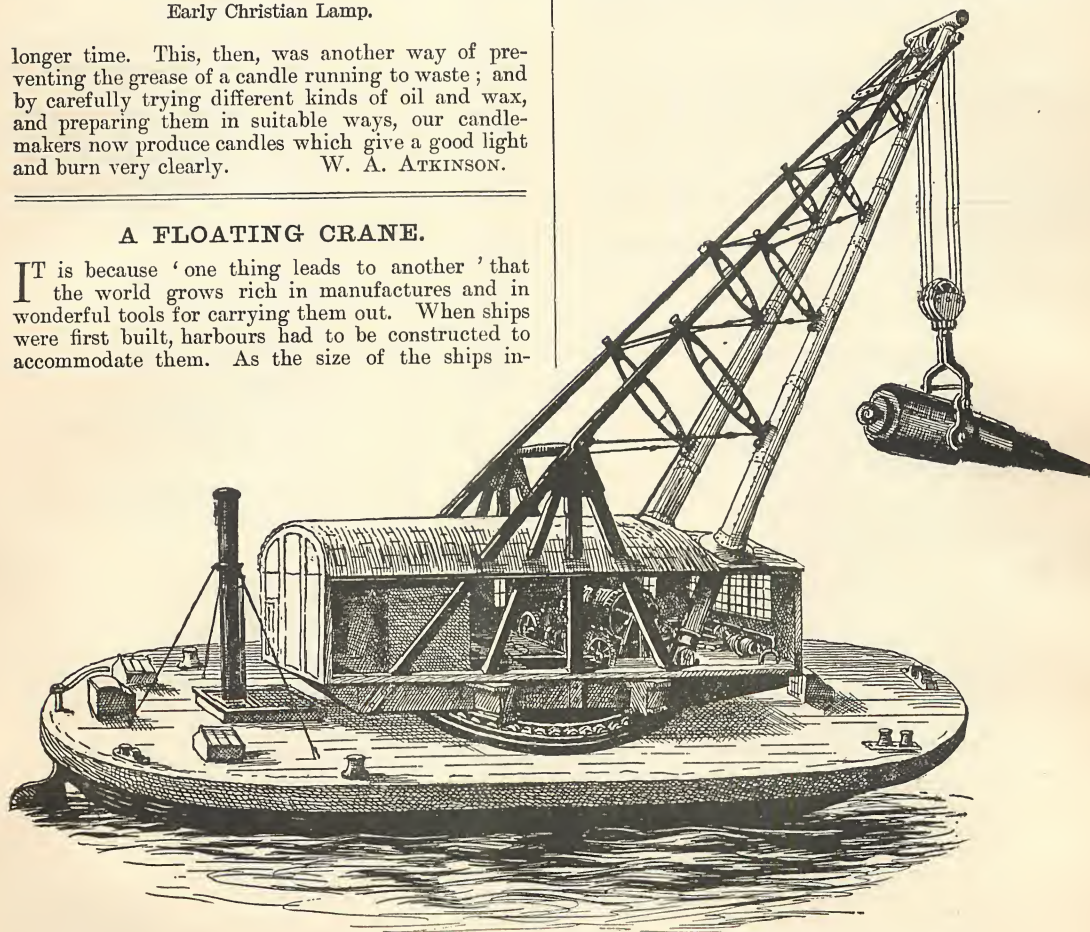
W. A. ATKINSON.

A FLOATING CRANE.

IT is because 'one thing leads to another' that the world grows rich in manufactures and in wonderful tools for carrying them out. When ships were first built, harbours had to be constructed to accommodate them. As the size of the ships in-

creased, it is easy to understand that the means of building them had to improve as well ; and one of the most wonderful advances made has been in the invention of engines for lifting heavy weights. Such engines are common on land, from the simple crane with a windlass at its base, to the long-legged giants we have most of us seen rearing their lofty heads far above some new city building. Then there is the travelling crane, which runs along on iron rails lifted thirty or forty feet above the ground on strong iron or timber columns. In such a crane the steel rope or chain dangles between the rails, and when this is hooked to the load on the ground, the crane winds it up, and carries it with ease to any point between the great supporting columns.

This is all very well so long as the weight to be carried is on land ; but the larger vessels in the harbours are often in need of help, and sometimes cannot come near enough to a dock-wall to receive the cargoes they require. At such a time the floating crane is all that could be desired. In the middle of a large, flat-decked vessel a circular table



The Floating Crane at Work.

is built, supported on a number of rollers, which allow it to be turned round in any direction. On this table are fastened the crane and its engine. Behind the engine stands an iron truck weighing one hundred and thirty tons, mounted on rails, which run across the whole width of the circular table. This truck, as we shall see presently, is in reality nothing more than a weight in a pair of scales.

Now, we will suppose that a great man-o'-war has come into harbour with some injury, and wants to have its heavy guns removed. Instead of being told to come to the 'doctor,' the 'doctor' goes to it; for the floating crane gets up steam, and, having arrived alongside, stretches its long neck over the bulwarks, and lowers its tackle to the gun in question. As you know, these guns are very heavy, and, when the crane begins to lift one of them, the front part of its hull sinks under the weight. But the moment this takes place, the truck we have mentioned is made to roll backwards from the engine till it is far enough off to balance the weight of the gun—just as in see-saw the lighter child must get farther and farther from the middle till he 'balances' his companion.

Of course this weight is even more necessary when the crane, having secured its load, has occasion to turn itself on the rollers under the floor, for then the strain is thrown on the width of the boat instead of the length. But the engineer can shift his truck to such a nicety that a floating crane may swing its load (of as much as fifty tons) where it will without altering the position of the boat.

The floating crane has been busy in Tilbury Docks ever since 1886, and we may guess that such a giant has done a good deal in so many years.

MY SPARROWS.

THE sparrows in my garden
 Like children fight and play,
 And when they see me coming
 They seldom fly away;
 They know I shall not harm them,
 And so are not afraid
 To hop about my table,
 While I sit in the shade.

The sparrows in my garden
 Will watch and wait for me,
 I know I am expected
 To ask them all to tea;
 But even in my presence
 Their good behaviour fails,
 For sometimes they are naughty,
 And pull each other's tails.

The sparrows in my garden
 Have found a place of rest,
 Amidst the ancient ivy,
 To build their little nest,
 And there they chirp and chatter
 Till winter-time comes round,
 When crumbs for them I scatter
 Upon the frosty ground.

G. D. LYNCH.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 99.)

AT breakfast Marley watched with astonishment the execution Jones, the third officer, did among the many good things put before him. He started with a big plate of oatmeal porridge, went on to chops, then he had ham and eggs, curry to follow, and bananas to finish up with. He had been on the bridge since four, however, and four hours on the bridge is the finest sauce in the world.

When Marley went on deck, he found Teddy looking over the after-rail.

'Come here,' said Teddy. He pointed into the blue water, and Dick saw what seemed a grey shadow—a stealthily moving ghostly shadow. It was an enormous fish.

'Shark,' said O'Brien, 'and a whopper. He's twenty foot, if an inch; and I can't fish for him. It's always like that!'

'Why can't you fish for him?'

'Because old Sprott is afraid of the line getting tangled up in the propeller, if we fish for sharks when the ship is moving. He's given orders against it—at least he did last voyage.'

The boys watched the shark for awhile, and presently came along Mr. Toms. The ship was still forging along slowly, dragging for the cable, and Mr. Toms, leaving his assistant to look after matters in the bow, was taking an hour's rest, which he deserved, for he had been at it since five.

He came to the after-rail, and looked over at the object that was fascinating the boys.

'Did you ever see a bigger shark than that, sir?' asked O'Brien, nudging Dick.

Mr. Toms gazed at the shadow in the water still faithfully following the ship.

'I don't know if I have seen a bigger shark,' said he at last, 'but I have seen a shark in a very much stranger position.'

'How was that, sir?'

'Did I never tell you of the shark that came aboard us when I was second cable engineer on the old *Grapple*?'

'No, sir.'

'Ah, well,' said Mr. Toms, lighting his pipe, 'I thought every one knew that yarn. We were anchored off St. Helena. You know at St. Helena the sea is very treacherous at certain times. It may be calm as a millpond, and suddenly, before you know where you are, great rollers come in, waves as high as that main-yard arm. We were anchored close in, and the second officer had rigged up a hook and baited it with a double handful of oily waste from the engine-room, and was fishing for a shark, just such another as this beggar, who had been round us all day with an eye to the scraps the cook hove overboard.'

'The Governor of St. Helena, or some big swell or other, was coming to dinner, and the table in the saloon was set out with all the best glass and show silver and pineapples and what not.'

'Just as four bells was striking, the shark grabbed the bait. The captain was ashore, and we clean forgot that the Governor was coming to dinner, forgot everything but the shark plunging and pulling at the line. We pulled him up a bit, and got a bight of rope round him, rigged a tackle, and began to hoist him in. A big shower of rain fell as we were hoisting, but, bless you! we didn't notice it, nor that the sea was heaving, and that great rollers were coming in.

'We had hoisted the shark twenty foot clear of the water when I heard a fellow cry, "Look out!" and the first big roller took us, pointing our bow at the sky, and swinging the shark out till his tail touched the water. Then swish! we went into the trough, our propeller pointing to the sky, and the shark swinging in-board. The fools let go the rope and smash! came the shark right on to the after-gratings, breaking them to match-wood, for he was a twenty-two footer, and he seemed as big round as a Pickford's van—almost.

'Swish! came the second roller, a bigger one than the first, and as we went into the trough, the shark, dragging the rope after him, was shot on to the main deck, skidded along it as if he were on skates, for it was all slippery from the rain, cannoned against the starboard bulwarks, and, as the next roller took us on the starboard bow, it shot him head-first down the saloon companion-way clean out of sight, and you wouldn't have known there was a shark on board only for the shouts of the second saloon steward, who was coming up the stairs with a tray of dishes in his hand just as old blowhard was going down.

'What happened then the chief steward told me. He was standing in the square by the after cable-tank, holding on to the rails. He said, "I saw Jones, the second saloon steward, shoot head over heels into the alleyway, followed by a tray of dishes and a shark. I was much surprised, as you may imagine. Jones was shot clean across the alleyway into the hydrographer's cabin, from which he bolted into the saloon, and hid in the cabin of the second cable engineer (which was mine). The hydrographer looked out just for a moment, then he hastily shut his cabin door and bolted it. He seemed to wish to be alone."

'The shark was now in the alleyway, his tail towards me, his head towards the open saloon door. He flapped his tail twice as if undecided as to whether he would go into the saloon or come, tail first, into the cable-tank. But he didn't shilly-shally long, for the next big roller decided the question, for it shot him right into the saloon, and banged the door to upon him. I heard various sounds from the saloon, where all the best glass was laid out, and covers were laid for twenty people, but I did not go in.

'Well,' continued Mr. Toms, 'you may fancy the state we were in, the ship pitching and all. Every one said some one ought to go into the saloon and shoot the beast, but no one offered. One man proposed to flood the saloon and float him out through the skylight; another, to train a steam-pipe aft and fill the place with steam from the main boilers.

But we could not do that because of the chap who had hidden in my cabin, and who was half mad with fright, and had his head out of my porthole hollering "murder!"

'We hoisted a signal of distress to the gunboat *Melampus*, which was lying in the anchorage; she signalled back, "What's wrong?" and we replied, "Shark in main saloon!" She thought we were hoaxing her, and told us to go to Jericho. We then tried to shoot the shark through the skylight. You could see him at times rolling about in the pine-apples and hothouse flowers, and cut-glass; but he had jammed his head between two legs of the table, which had broken across the middle, and the after part of the table fitted him just like a sun-bonnet, and the bullets glanced off the polished mahogany of it, so we gave over for fear of one of them piercing the door of the cabin where the steward was.

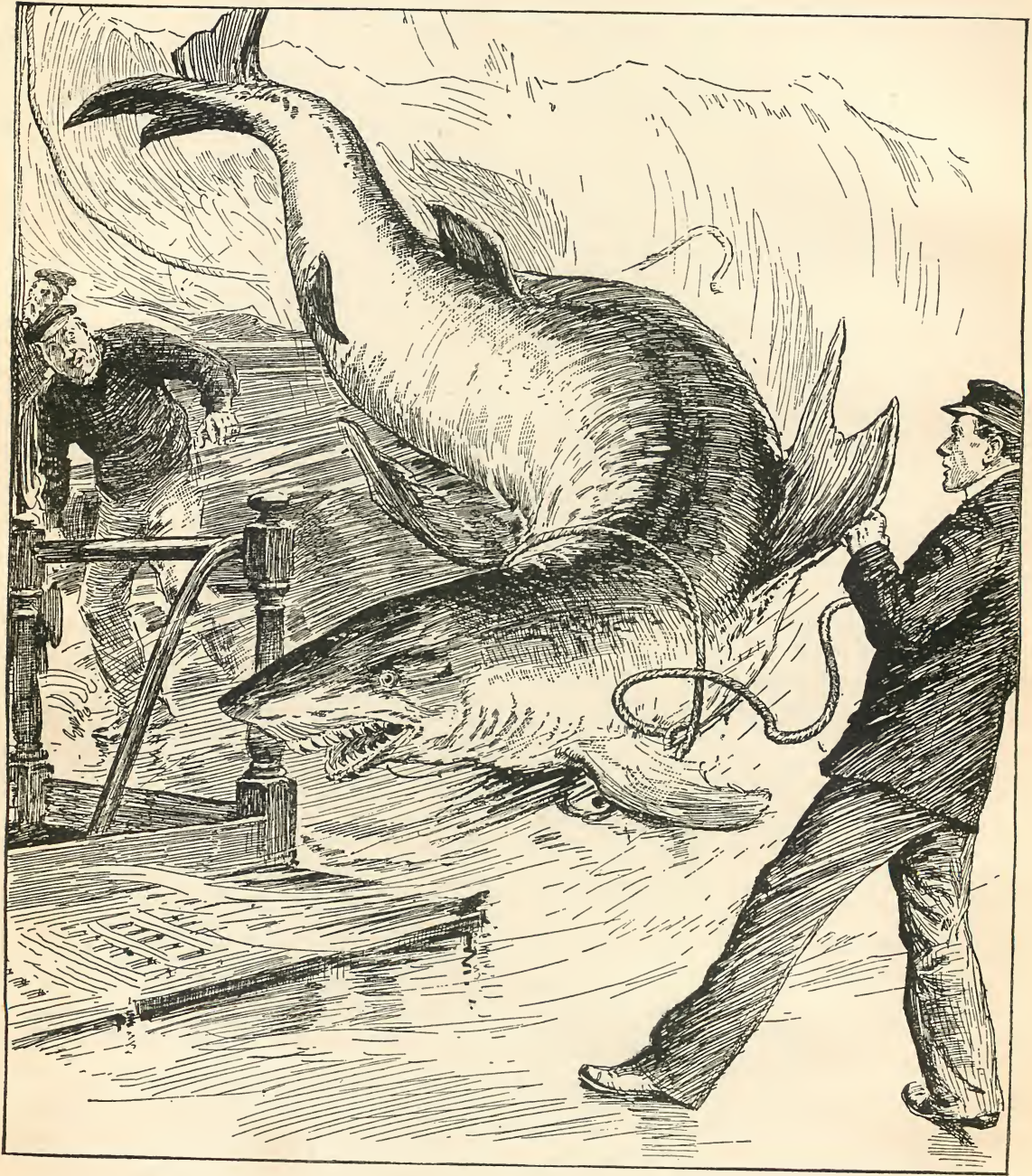
'The rollers had ceased now, and the captain came off, and—there was trouble in the ship that night. All night long we heard old Jack Spratt in the saloon, evidently trying to get asleep, and finding the place uncomfortable. Sometimes he'd lie quiet, and sometimes he'd, maybe, think of the past, and then he'd bend himself into a half loop and let go several times running, and every time he seemed to hit glass and crockery-ware, and judge by the noise. The chief steward said he was breaking as much glass as a saloon steward—almost.

'At six in the morning we held a council of war. The skipper said the second officer had brought the brute on board, and would have to get him overboard again, or he'd shove him down the saloon skylight to keep company with his friend. The skipper was right down tearing mad, for when he'd sent off the night before word to the Governor not to come to dinner as there was a shark in the saloon, the Governor thought the Old Man was cracked, and sent off his doctor to inquire; besides, all the ships in the anchorage—the *Melampus*, two old wind-bags, and a Dutch oil-tank—were splitting their sides laughing at us. Well, the second officer thought and thought. Then he had the saloon skylight removed; then he got a leg of mutton from the cook, tied it to a string, and lowered it till it dangled over the edge of the table that covered the brute's head. It couldn't resist it, but turned right on its back and opened its mouth, as if to say, "Drop it in," just the way a child does for a lolly-pop, and whilst in that position the hydrographer, who was standing by with an express rifle, shot it through the heart.

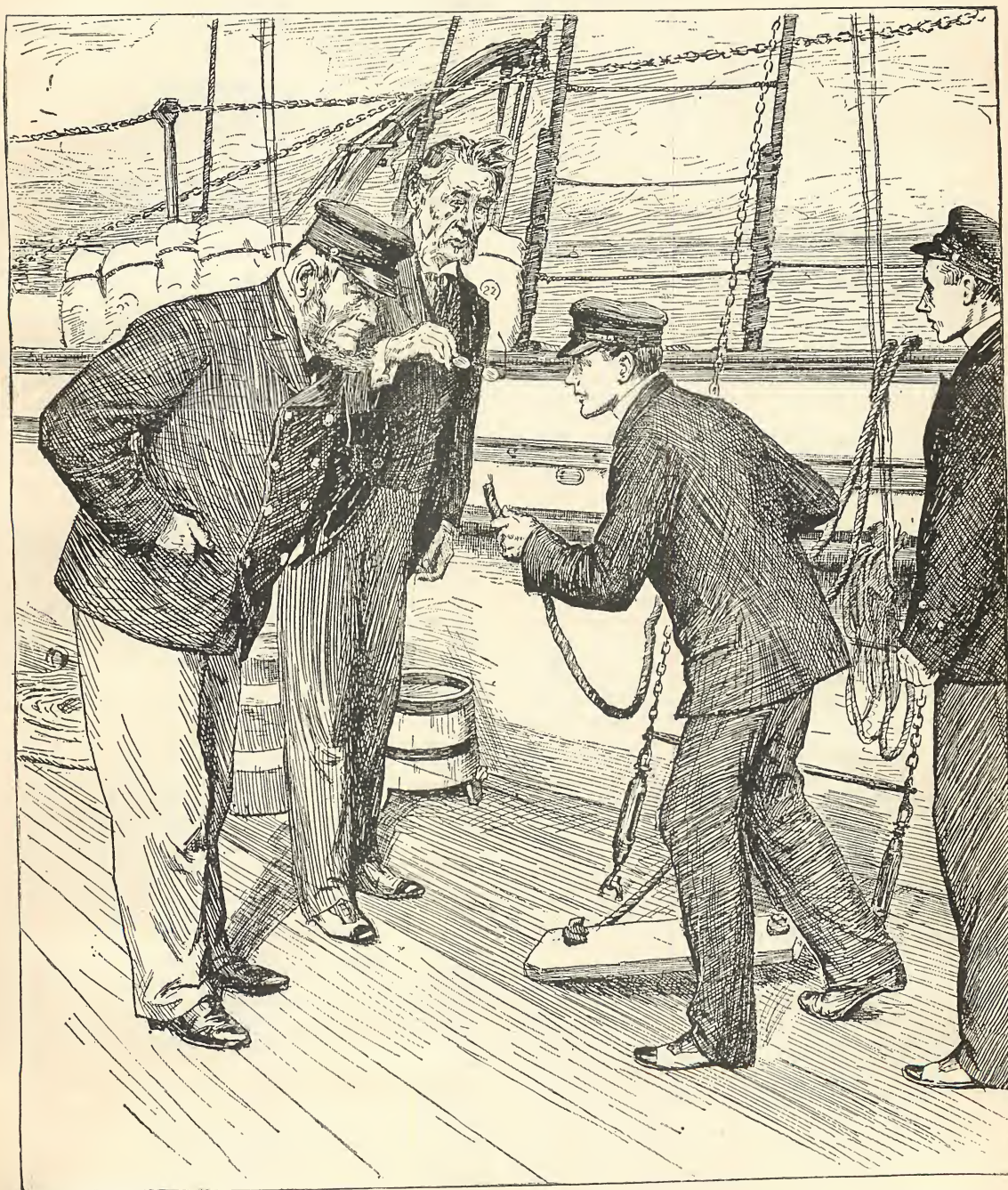
'You should have seen the saloon when we went down! Everything smashed, and my lord on his back with his head on a cushion that had somehow got under him; squashed pineapples and bananas and roses all about him, the tablecloth wound round and round and round his tail, a big water-bottle under his starboard fin, and a sort of peaceful smile on his face.'

Mr. Toms tapped the ashes out of his pipe, and without another word went down to breakfast.

(Continued on page 114.)



"The shark was shot on to the main deck."



“‘It has not been broken, it has been half cut in two.’”

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 111.)

'Do you believe all that story?' said Marley.
'No, I don't,' said Teddy.

Then they turned their backs to the after railing and stood watching the figure of Don Alvarez as he paced the bridge and looked at the cable-men at work.

The ship was still grappling; she had been twice over the ground, and now she was turning to go over it again.

'That's a worse shark than the one behind us,' said Teddy, nodding at the figure of the Don. 'He gives me the cold creeps when I look at him. He's got a bad face, and—the cheek of him!—won't dine with us, but has his meals served in his cabin, as if we weren't good enough for him—and, Dick!'

'Yes?'

'Last night I saw him talking to that Russian Finn. They only spoke for a moment or so, and I wasn't near enough even to hear if they lowered their voices—'

At this moment Mr. Lockhead came out of the paying-out office.

'Adams!' cried he. No reply coming, he went to the starboard bulwarks and looked over.

'Why, where has Adams gone?' cried Mr. Lockhead. 'Come here, O'Brien! Do my eyes deceive me, or is the stage he was sitting on broken?'

Teddy ran and looked over.

Adams, it appears, had lowered himself over the side, on a board attached to two ropes, to paint over some ugly scrapes the immaculate white side of the ship had received when coming out of dock, two days before O'Brien and Marley joined. The first officer should have had the thing done in the Thames before starting, but it seems a passion with first officers to paint the ship when at sea. It is nothing, when you are just taking your seat on a locker, to hear a voice cry out too late, 'Don't sit down on that locker! Ah, you've done it! Now go and look at your trousers and see what a mess you are in.' The third officer of the *Kingfisher*, Mr. Jones, was pretty much the same as other third officers, and he had ordered Adams to lower a little stage, take a pot of paint and a brush, and paint over the scrapes on the side.

When Teddy looked over he saw the stage dangling by one rope and the end of the other rope hanging loose.

'Good heavens!' he said. 'One of the ropes is broken. When did you see him last, sir?'

'He went down when you were at breakfast,' said Mr. Lockhead, 'and I told him to report to me when he had finished, as I wanted him to file the lock of my desk, which gets jammed sometimes.'

'Oh, poor chap!' said Teddy. 'The rope is broken, and he's lost!'

'Run, O'Brien! run and tell the captain,' said Mr. Lockhead in a distracted manner. 'Two men lost on one expedition—we've never had such accidents before. I don't know what ails the ship,' continued the old gentleman, taking off his spectacles and wiping them on his sleeve and apparently addressing them; 'I don't indeed. We shouldn't have sailed on a Friday, Mr. McGrath says; maybe that's it, or

maybe it isn't, but there's something wrong some where, though I don't know where.'

'What's all this?' inquired Captain Spratt hurrying up, with O'Brien at his heels.

Mr. Lockhead pointed over the side and explained. Meanwhile Teddy was hauling in the loose rope-end. 'It has not been broken,' he said. 'Look! it has been half cut in two.'

The thing was evident to a sailor's eye. The strands of the rope had been half divided, the remainder had given one by one as the unfortunate Adams sat at work, and then the whole thing had gone, casting him into the sea.

'But,' cried the captain, 'if he's fallen overboard, he must have cried out.'

'There was no one aft to hear him, sir,' said Mr. Lockhead. 'I had the door of the paying-out office shut, and one can't hear a sound when the door is shut.'

'Just as I was going down to breakfast,' said O'Brien, 'I heard a cry. I thought it was the cry of a sea-bird. I thought it must be a very big bird by the sound, and I was going back to look and then I didn't, for I was hungry—'

'Oh, you!' said the captain contemptuously; 'you are always in the way when you're not wanted, and when you're wanted you aren't; there, drop that rope and tell the bo'sun to pipe all hands on deck.'

All hands except the engine-room staff and the cable-men at work forward, were brought on deck. The roll was called; Adams' name was called, but Adams did not answer.

The hands were dismissed, and Captain Spratt descended to his cabin to enter one more fact in his log. Naturally bad-tempered, he was now in a state of exasperation. The loss of two men by foul means in such a short time would form a matter for a Board of Trade inquiry, and that is always an unpleasant affair for a sea-captain. Owners look askance at a captain whose ship has fallen foul of the Board of Trade, no matter how innocent that captain may be.

Therefore, as he sat writing up his log, he was not in the best possible humour to receive the visitor who was knocking at the door at the moment when he had begun the words: 'At 9 a.m. this morning, Adams—'

(Continued on page 126.)

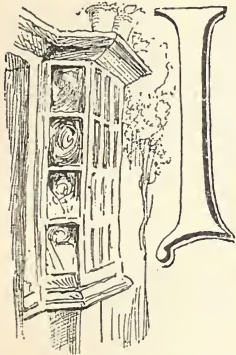
RICE-THROWING.

MANY readers of *Chatterbox* have no doubt witnessed with amusement at some wedding how people in the crowd outside the church threw rice or confetti, perhaps both, over the newly-married pair. Possibly they may themselves have taken part in the fun, for fun it seems to most persons, though the act has really a serious meaning, and is intended to express good wishes. The tiny bits of coloured paper are harmless enough, though they make a litter, and cling rather unpleasantly. But rice has objections too: there have been instances where the grains have entered the eyes, causing pain, or even serious injury.

It is supposed by some writers that the use of rice at weddings must have come from India, where the article forms so important a food to millions of the people. To have plenty of rice means prosperity,

and throwing its grains over the newly-married expresses the hope that they may never be in want. The Orientals, however, did not stop at rice; what we call 'cereals,' which furnish bread to mankind all over the world, had frequently a part in wedding ceremonials. Among the old Romans, it was the custom to scatter corn over the path along which the bride had to walk. In some parts of India the women relatives form a circle round the bride, and her new mother-in-law puts upon her head a measure full of corn. Then the husband comes and takes handfuls of corn from this measure, which he scatters over himself. In Poland people used to throw at the bride's door wheat, barley, oats, and beans, as a token that she would never want these while she did her duty at home. Italians still throw showers of nuts at the happy couple, and carry round the house where they are to live torches made of hazel-twigs. An old German custom was to toss from the windows, as the couple passed, little cakes and buns, which were no doubt soon eaten up by the children running about the streets.

BULLS'-EYES.



If you are observant, you will often see in the windows of old cottages small panes of glass which have a thick swelling, or even a knob, in the centre. These swellings are commonly called 'bulls'-eyes.' They are rather unsightly, and though they will allow the light to pass through them, they distort the appearance of everything which is seen through them, even if they do not quite shut out the view.

You will naturally ask why people put such nearly useless glass into their windows. Before we try to answer this question, however, it will be better to ask what the bulls'-eyes really are. They are made of glass, of course, like the flat panes which we are almost certain to find in the same window. But what we really want to know is how and why they are made.

If we go into a glass works, we shall find one or more furnaces in which there are placed a number of glass-pots or crucibles made of baked clay. Each of these contains various common materials, chiefly sand, soda, and lime, which when they are melted together produce glass.

We know quite well that glass can be worked up into many forms, such as bottles, dishes, vases, tumblers, chimneys for lamps, and lastly, the flat window panes in which we are just now most interested. There are several ways of making window glass, and if we saw them all we should only find the information which we want in one particular operation, that of making what is known as *crown* glass.

The glass-maker's chief instrument or tool is a blow-pipe, a long tube with a mouthpiece at one end.

The workman, or glass-blower as he is called, dips the lower end of his blow-pipe into a glass-pot containing melted glass, and when he draws it forth again there is a red-hot lump of glass upon the end of it. He blows through the tube, and the lump soon swells out into a thick bubble of glass (fig. 1 *a*). He desires to flatten it, and in order to do this he simply holds the bubble over his head, and its own weight has the desired effect (fig. 2, *b, c, d*).

An assistant now takes an iron rod, known as a pointel, dips the end of it into a glass-pot, and draws out a small ball of glass. He applies this ball to the flat side of the bubble opposite the end of the blow-pipe, and the hot glass of the ball and the bubble unites. The glass-blower takes up a cold tool, and runs it round the neck of the bubble near the end of his blow-pipe (fig. 4), and the hot glass cracks where it is touched, and breaks away from the pipe.

The assistant has now a rather flat bowl of glass attached to the end of his pointel—a *bowl*—because part of the bubble has been cut away in removing it from the blow-pipe. The glass-blower takes the pointel in his hands, and holds the bowl in front of a large hole in the side of a 'flashing-furnace,' where hot flames issuing from the furnace may play upon it. The heat is so intense that none but a workman continually accustomed to it could bear to approach it, and the glass-blower often finds it necessary to wear a screen to shield himself from it. While he holds the bowl in the flames, he keeps it continually spinning, like a wheel on the end of its axle, by trundling the pointel (fig. 1). Now all things twirled in this way have a tendency to fly from the centre round which they are moving; and the glass bowl, as it grows softer with the heat, spreads out flatter and flatter. At length this outward force is such that the bowl rends at the rim, and the soft sides fly out level with the bottom, and form a flat, circular sheet of glass.

When this happens the sheet is withdrawn from the furnace, and allowed to cool very gradually. The pointel is detached, and the circular sheet of glass is placed in an oven, to be baked, as it were, and to be allowed to cool very gently, lest it should crack. When it is drawn from the oven cold, the panes of glass which are required for windows are cut out of the sheet between the centre and the edge by means of a diamond. When the sheet is completely cut up in this way, there remains a little pane of thick, knobbed glass, where the pointel has been attached. This is the 'bull's-eye' of that particular sheet of crown glass.

Having learned how the bulls'-eyes were made, it is easy to guess how they came to be used in the poorer classes of old houses. They could not be sold as good crown glass, but the manufacturer preferred to sell them at a lower price rather than return them to the glass-pots to be melted up again. Many people who could not afford to pay the price of good glass were glad to buy these bulls'-eyes at a cheap rate.

In recent years many imitation bulls'-eyes have been made, and used in the windows of new shops and cafés built in quaint imitation of old ones. In these instances the bulls'-eyes are only intended to keep up the appearance of age in the new buildings.

W. A. ATKINSON.



Fig. 1.—“The lump swells out to a thick bubble of glass.”

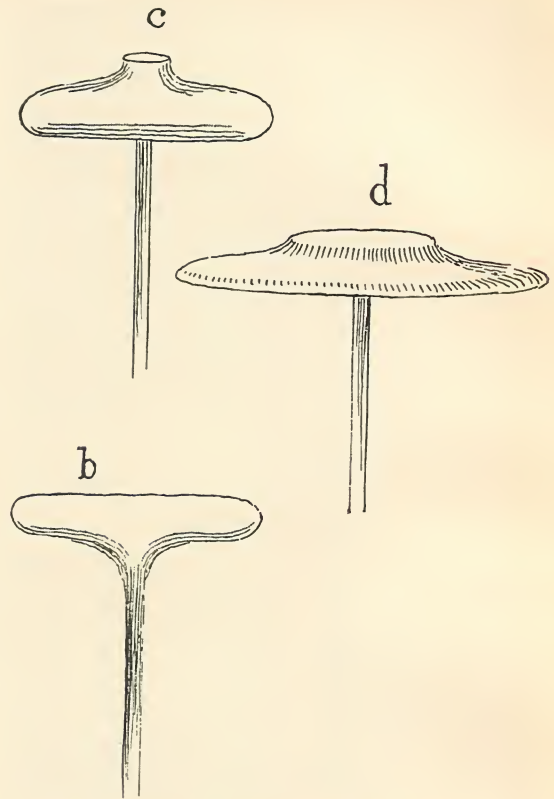


Fig. 2.—Stages in Flattening the Glass Bubble.



Fig. 3.—“He keeps it continuously spinning.”

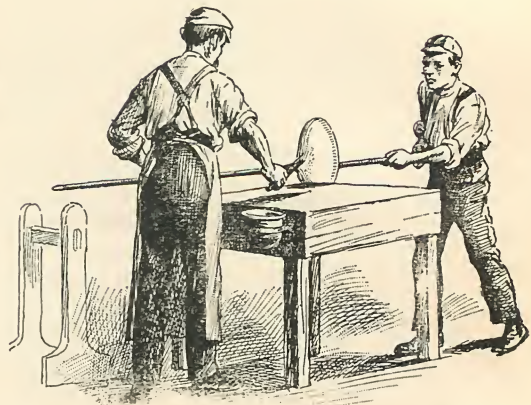


Fig. 4.—“The glass blower runs a cold tool round the neck of the bubble.”



"We are very fat and lazy."

UGH! Urnt! Men are a nuisance! It is bad enough to be taken away from the hedges and ditches; but to be hauled out into the nasty sunlight, to be pulled about, to be called 'Poor little pig!' and then photographed, is altogether too bad!

My brother had a very narrow escape. When the hay he was rolled up in was moved, he kept quiet; soon he heard a crackling and felt uncommonly hot, so he decided to leave. It was well he did so, for his spines were already burning. He was captured and came here to me. Blackie, another of my companions, is very handsome and much darker than I am, but she cannot stand the Man.

The Man is a funny creature; I have been with him all the winter—that is when he was funniest: he knows I sleep during the cold time; but to his surprise my bread-and-milk was eaten. So he put more and more and more, until one day, at the beginning of spring he saw a rat running away with a piece of bread. The Man talked fast and loudly and woke me up. He feeds us well—worms and grubs, even in dry weather when they are far underground, meat, bread-and-milk and water; we are very fat and lazy. While he was photographing us

he tried to find out why our noses ran with water. They always do when we are lifted up, because we are naturally nervous.

Look at me politely bowing to you! He says the muscle on my back, that I use for curling purposes, is like an overcoat; he hooks his fingers under it and carries me about—a novel and not unpleasant sensation. He is very interested in what he calls 'a serrated flap' on either side of my nostrils; it is that which makes my nose look wider than it really is.

The Man likes to stroke the soft fur on my underneath; he says it is like a cat's—a cat is another thing he keeps. One of them, a young one, seeing me run, struck me hard with its foot; I grunted with pleasure as it ran away making loud noises. I must confess my arguments were mostly to the point. Even the Man gives me up as a bad job when I decide not to open; he has tried all the known methods, save killing me, and only succeeds in making his fingers bleed. He carries me about in a cloth those times.

Now I know that he will not hurt, I don't so much mind him; but some of them are brutes. So are dogs. A dog killed my wife: it sat beside her quite still

until she thought that it must have gone, and so she started for home; as quickly as a frog jumps, so jumped the dog and crushed her poor head. Its mouth was scratched a lot, though!

They say some of our folk kill the little bird-things in farmyards; but I am not sure of this; the big birds look so fierce and make growly noises, and noises always annoy me. Have you ever heard that silly tale about us sucking milk from cows? Our mouths are far too small, and cows are too timid to let us prickly chaps come close. Have you ever heard, too, that we roll on apples till they stick to our spikes, and then take them home—silly, isn't it? They would fall off, if they ever managed to get on. Apples are not bad eating, if they are broken up, but I prefer meat or worms.

This afternoon I was greatly disturbed—Blackie had young ones in our box: ugly, blind, red things, which squeak foolishly and have a pitiful mockery of spikes on their backs. Rotten things altogether. I thought that to-night, as soon as the Man left us, Fizzer and I would eat them. The Man thought so too, and has fastened us in a separate place. I noticed that he was very careful not to touch either of the three youngsters himself, for he seems to know that Blackie wouldn't like it and would have eaten them herself, if he had.

Oh, that is enough about me. I expect the Man will photograph the youngsters soon: till then, no more from 'Piggy.'

F. G. PALMER.

A SCENE AT TORBAY.

NOVEMBER 5th, 1688.

THE waters of the English Channel were ruffled by a strong east wind. During several days such a wind had been waited for by a certain admiral and his fleet as they lay in the Dutch port of Hellevoet Sluis. And now anchors were lifted, sails were spread, and out into the North Sea glided six hundred ships—Prince William of Orange, on the *Brill*, leading the van.

In the mouth of the Thames, one hundred miles away, lay the ships of James II., but the east wind held them prisoners there, and all that the English Admiral could do was to send out smaller fast sailing-boats to watch the movements of the great Dutch Armada. Back they came ere night-fall to say that the enemy were shaping their course for the coast of Yorkshire, and, in accordance with this information, troops were dispatched by the King with orders to oppose their landing.

It was not known until too late that Prince William had suddenly changed his course, and was sailing with a favourable wind for the Straits of Dover. Truly it was a magnificent sight to watch that mighty fleet pouring through the narrow neck of water; and the English people who crowded the shore must have felt a thrill of hope to see in what force the deliverer came. For was it not by the request of the nation that William was coming to wrest the crown from the ill-governing James? They had patiently borne his tyranny and mismanagement for too long. So the wind that just one hundred years before had scattered the great Armada of Spain, and saved England from Philip II.,

now wafted this new armada to our coasts to rescue England from James.

Down the channel the white sails sped, leaving the snowy cliffs of Kent behind them; then the Isle of Wight was passed, and on the morning of November 5th, a day of bad memory for the House of Stuart, the good ship *Brill*, with her numerous escort, cast anchor in the sheltered waters of Torbay. Prince William stepped on shore at the little fishing village of Brixham, and the stone on which the deliverer's foot is said to have first rested is shown there to-day.

The news of his arrival sped to Whitehall. King James's head was bowed beneath the blow, for he read in the unopposed landing his sentence. From that hour messengers continued to arrive with unwelcome words for the royal ears. The fleet had left the Thames in pursuit of the invaders, but had been beaten back, disabled by a violent storm, into Portsmouth harbour. He could almost hear in imagination the tramp of that victorious army marching up from the west country, joined each day by those whom James had called his 'friends.'

He had been an unwise, an unjust man, and conscience told him that when Prince William's foot touched the sea-washed coast, he had mounted the first step of the throne, and had laid his hand, by the people's will, on the sceptre of England.

THE FERRY-BOAT.

'WHERE ought to be a ferry here,

This water makes me shiver;
I cannot reach the farther side,
Growled Bruin, as he vainly tried
To swim across the river.

'Let's start one,' cried a beaver tribe,

Who chanced to be in hearing.

'This log shall be the ferry-boat,

Upon it you may safely float.

And we will do the steering.'

Old Bruin clambered on at once,

Without a word of greeting:

'Be quick,' he growled, 'for Mrs. Boar

Invites to supper on the shore,

And I must join the meeting.'

The willing beavers pushed behind;

The log was firm and steady:

Yet Bruin grumbled with a will,

'Faster!' he cried. 'We're standing still;

I'm sure the supper's ready.'

But, when they reached the bank at length,

And Bruin would have landed,

The beavers had a word to say,

'You shall not land unless you pay;

Quick! or we leave you stranded.'

'I will not pay a cent!' said Bear,

'Who tries to cheat me, loses.'

'Then off you go!' the beavers cried,

And sent him spinning down the tide,

The current caught and swept him wide,

Leaving him on the distant side,

One mass of aches and bruises.

The beavers watched him creep ashore
 With laughter long and hearty ;
 Bruin alone was cross and sad,
 For even Mrs. Boar was glad
 He hadn't joined her party.

A. KATHARINE PARKES.

ANIMAL MAKESHIFTS.

True Anecdotes.

IV.—ATTEMPTS AT DOCTORING.

MUCH may be learnt in many ways from our friends in fur and feathers, and, besides other useful knowledge, they teach how disease may best be treated. When left to their own free, wild lives, to breathe fresh air, drink pure water, and take the food and exercise decreed for them, the pains and aches of animals are few ; still, they meet with accidents, and even in a state of nature cannot be altogether free from the ills to which all flesh is heir. For their few and simple ailments, remedies as few and simple are known to them, the chief being rest and either fasting or a change of diet, with, at times, the use of herbs known to themselves.

They know whether heat or cold is suitable in each case as a remedy, whether a dry or moist treatment, whether much air or much shelter, and so on. Animals suffering from fever eat little or not at all, keep quiet, sleep much, seek darkness, drink plenty of water, and even bathe in it.

A chimpanzee, if wounded, stops the bleeding by pressing its hand on the wound, or sometimes by making a sort of plaster of grass and leaves which it applies to the place. When an animal's broken limb hangs on, he finishes the amputation with his teeth, like a surgeon using his knife. It is when animals are domesticated and begin to lead unnatural lives, that occasionally, from the neglect of unkind masters, and always, more or less, from loss of liberty and changed circumstances, their illnesses become many and grievous. Even then, if they can, they will find remedies for themselves.

Dogs, cats, horses, sheep, goats, cows, rabbits, all understand the use of certain grasses and herbs which they pick out, and which are their medicines.

Poor piggy, shut up in a dirty sty, is subject to illness which can almost always be cured by turning him out to feed as he likes. 'No animal can have its digestive organs more easily thrown out of order than a pig,' says a writer to the *Rural World*; adding, 'A pig loses its appetite like human beings, and a good way to bring it round is to take all the rings out of its nose and turn it out into a meadow or field, and let it do a little mischief.'

A dog which was bitten by a viper was seen to plunge his head daily into a running stream, and he was healed by the cold-water cure. Another dog, after being run over by a carriage, actually lay down by choice in a shallow brook for three weeks, where his food was brought to him, and he recovered. A terrier who hurt his eye, lay under the counter of a shop, away from light and heat, though the front of a hot fire was his usual place ; he fasted, drank water, and spent his whole time in holding his paw

to the sore eye, keeping it continually moist by licking, till the eye was well.

Cats are well known to dislike a bath, yet a doctor, writing to the *Lancet*, tells of a puss brave enough to stand for forty-eight hours under a jet of cold water to heal a sore.

The creatures that are always with us learn a generous faith in man, and believe that the hand from which they have received nothing but good must always mean kindness, even though it should, for some reason unknown to them, inflict pain. The gratitude shown when once the benefit is reaped puts to shame the languid thanks paid by many a human patient.

A short time ago, a surgeon noticed a small dog shivering with pain and crouching in a street corner. When he spoke kindly to the little creature, it limped after him, and on reaching his surgery, he dressed a wound in the leg which had caused the pain. The dog departed, with many a wag of the tail, seeming well to know where he lived. From that day he appeared every morning regularly at the surgery door with the other patients, leaping around his benefactor with yelps of delight, and saying 'thank you' as plainly as he could. This went on for weeks after the leg was well and the bandage had been removed.

A very touching case of this faith in man was that of a mother elephant and her first-born. She was willing that her child should undergo pain for his good, and to insist in his bearing it, often a harder thing for a parent to do than enduring it herself.

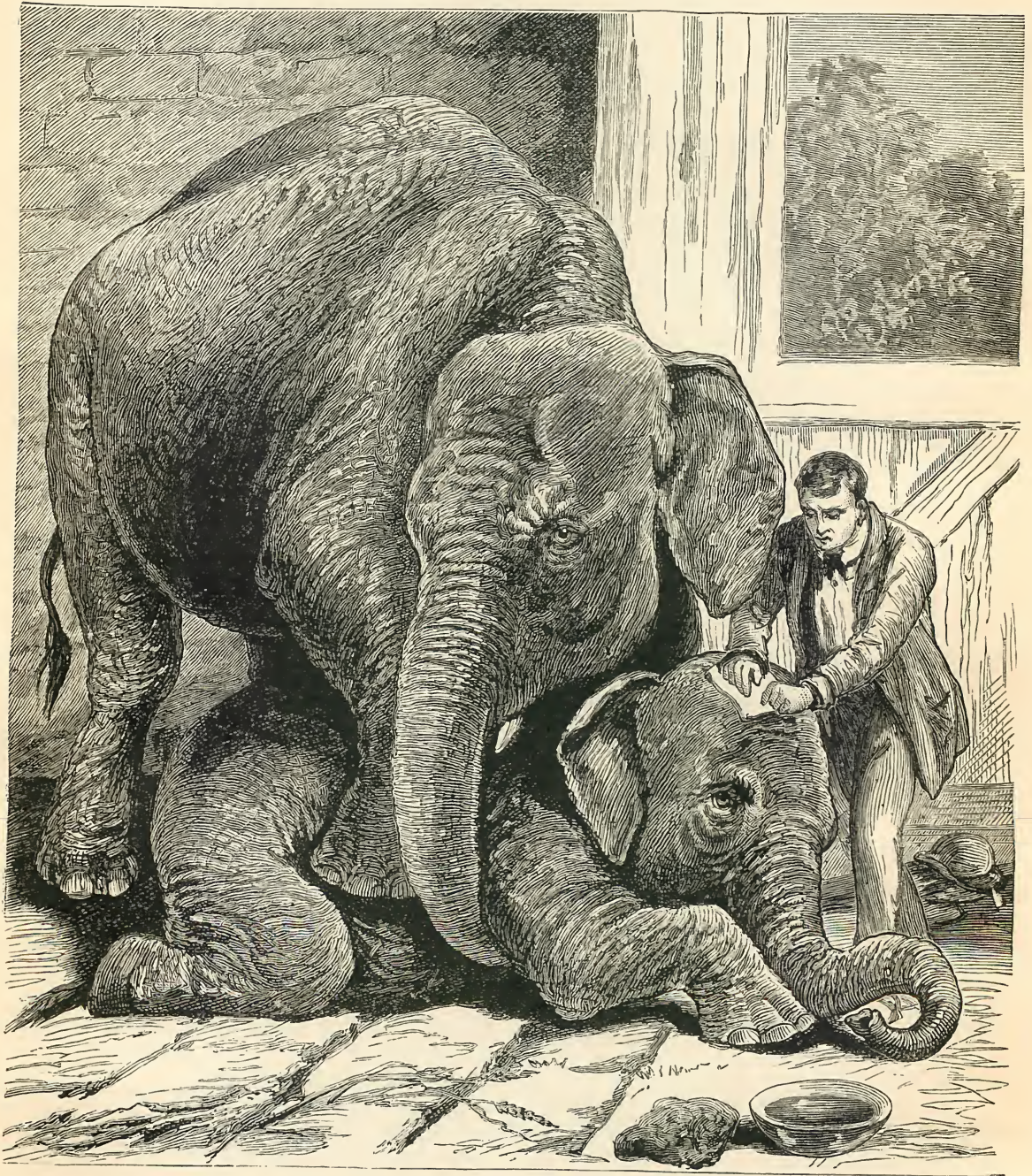
A young elephant received in war a wound on the head which made him frantic, so that he would let nobody, not even his keeper, go near him. At last the man hit on a plan for his relief. By words and signs he made the mother of the wounded elephant understand what was wanted. The sensible creature at once seized her son with her trunk and held him down, groaning with agony, till the surgeon had completely dressed the hurt.

Animals go a step further and show sympathy with suffering in others not of their own kind. A traveller saw a dog run over in a stable-yard, and, as he was hurt, he was tied up under a manger amid a crowd of sorrowing spectators. One of these was a tame raven, who took the case so much to heart that he paid the dog a visit each day, not to comfort him with mere words, but to bring him a bone from his own dinner, which he took care to place well within the sufferer's reach.

There is no limit to the range of this beautiful pity ; no insect is too small to feel sympathy. If ants find a wounded friend, they carefully anoint his sores with a liquid from their own mouths, and if he cannot walk, they carry him home.

But the maxim, 'Prevention is better than cure,' is that by which animals avoid the thousand and one diseases into which luxury, idleness, and self-indulgence drive a large part of our race. Human beings can learn much from them of how to stave off illness by cleanly habits, pure air, exercise, temperance, and hardy ways. Alas ! that the innocent must share with us the evils which follow the breach of noble health laws given by their Creator and ours.

EDITH CARRINGTON.



“The sensible creature held him down.”



“Mr. Herbert hurried to the help of the old countryman.”

A GOOD SAMARITAN.



AMONG the many beautiful characters who meet us in the history of the seventeenth century, none is more lovable than George Herbert, the poet-rector of Bemerton, near Salisbury. Living the simplest of lives, he was the ideal country clergyman, the father and friend of every soul in his little parish. It is told of him that an old woman once sought him with a long tale of distress, to which he listened with the utmost patience, hearing all she had to say before relieving her, and sending his wife to her next day with the gift of a blanket. 'It was some comfort to the poor soul to be heard patiently,' he replied to a less considerate friend, who would have stopped the wearisome tale at once by an alms.

It was Mr. Herbert's custom to walk regularly into Salisbury, to join a little gathering of musical friends and enjoy some playing and singing with them. On one occasion, as he made his way through the country lanes to the city, he came upon an old man whose horse had fallen in the road. Mr. Herbert had his coat off directly, and hurried, a true Good Samaritan, to the help of the old countryman; parting with him, when the horse was on its legs again, with some kindly advice not to over-tax the poor beast, and a small coin to make better cheer for them both. There was considerable amusement at the musical party, when Mr. Herbert, usually the pink of neatness, arrived in a much bespattered condition and somewhat dishevelled by hurry and hard work; but the poet took the laughter in good part, and assured those who suggested that such work was beneath him, that his heart was the lighter for his fortunate encounter. Certainly such a man spoke from his own experience when he wrote the truth that 'All worldly joys go less
To the one joy of doing kindnesses.'

FROM A PEDLAR TO A KING.



ONCE upon a time, long ago, Peter Wattlebury sat in the kitchen of his mother's cottage, eating his breakfast. The sun shone through the little diamond-paned window with a merry glow, and the happy summer wind had a lot of pleasant things to say as it rustled the flowering vine on the wall of the cottage in which Peter Wattlebury's mother lived. But Peter did not see the sun nor

hear the wind, for his forehead was wrinkled in a perplexed way. He was full of gloomy thoughts, and, being so, how could anybody expect him to know what a beautiful morning it was? The fact is it was nearly time to go to school, and Peter knew that he had not learnt some of his lessons properly. He therefore found this a very doleful breakfast-time, and as the cuckoo clock warned him that the time was drawing very near for him to go, he pushed back his plate and stared at the clock with an appealing look.

As he thus sat in silence, the sound of distant whistling came on the wind, and crept softly into Peter's ear. At first he took no notice of it, but as it grew louder, the ticking of the cuckoo clock seemed to beat time to the tune, and almost unconsciously Peter began to tap his foot upon the floor. It was a pretty and very cheerful tune, and as it flowed into Peter's ears, the frown began to fade away from his forehead. At last he jumped from the chair with quite a cheerful haste, and ran to the window to see who it could be whose heart was sufficiently light to whistle so merrily.

Tramp, tramp, tramp, on the dusty road outside, and tick, tick, tick from the cool room behind him; and the next moment Peter saw a heavily-laden old pedlar, grey-haired and feeble-limbed, trudging on his road to market. He was whistling like a lark, and his ragged clothes, his grey hair, and his feeble limbs seemed all to disappear as Peter listened. Even the heavy load that bent his shoulders down seemed to bob about like a bundle of feathers. Peter Wattlebury turned back into the room with a brighter face, and in another minute or two was himself jogging along the dusty road on his way to school.

* * * * *

Ploughman William stopped at the end of the furrow and wiped his brow before turning his horses for a fresh start. It was a hot morning, a very hot morning, and he felt extremely tired. Besides, William was rather troubled about things at home. His little daughter was ill, and he and his wife had to leave her lonely during the day in order to earn the money to buy what was necessary to make her well again. It was a very bad job, and the very act of thinking of it made William sit down on the tail of his plough and rub the side of his nose with perplexity. What was he to do? Work went sadly against him when he felt so troubled. He longed to go and sit beside his little daughter's bed and see what he could do to soothe her pain, and yet he knew that he would be doing less for her than if he— What was that? The wind across a neighbouring field brought the sound of a merry whistle, and in spite of himself William raised his head to listen. It was a pretty tune, and he had heard it before, but he had almost forgotten how cheerful it was. As the sound came nearer, he got up from the plough-tail and looked over the hedge into the dusty road. A boy was going by on his way to school, whistling merrily. It was Peter Wattlebury, and the tune he piped so cheerfully was the one he had heard a short time before issuing from the lips of the poor old pedlar on his way to market. William turned his horses,

and started on a new furrow at the very moment when Peter Wattlebury disappeared into the village school-house.

* * * * *

Farmer Sprout stood in the stable doorway and looked up at the clouds. There were not many of them, and they were so high up that he felt there was no chance of rain. Farmer Sprout was disappointed again, and as he walked away from the stable door he began to think of the many things that had not gone well with him of late. The weather in the early spring had been so hot and dry that there had been a very poor hay-crop, and when he had gone to the trouble of mowing it, the rain had come down in torrents for a whole week and ruined it.

'Then there's that boy,' said Farmer Sprout to himself. 'I have paid such a lot for sending him to college, and now he writes to say he is awfully sorry, but he has failed to pass his examination. What am I to do with such a boy as that?' Altogether things looked gloomy for Farmer Sprout, and as he wandered from the stable-yard into the fields he looked neither to the right nor to the left. But he had not gone very far when, somehow or other, his spirits began to rise; it was only a very little tiny bit, but he certainly was beginning to feel less despondent. The fact is, he had heard the voice of some one singing on the other side of a hawthorn hedge. His path led him towards it, and as he drew near Farmer Sprout could not help standing on tiptoe to see who it was. It was a first-class song, with such a capital tune, that he was quite anxious to find out all about it. He clambered over the stile into the ploughed field, and there, to his surprise, he found that the music, accompanied by the jingle of horses' harness, came from the lips of his ploughman, William. It was the tune that Peter Wattlebury had heard the pedlar pipe as he trudged along to market. 'Well,' said Farmer Sprout to himself, 'here's somebody, at any rate, with sorrow as great as mine, who sings notwithstanding.' He twirled his stick in a happy way as he walked along, and unconsciously began to hum.

* * * * *

The porter at the entrance of Lord Holdham's park trotted from his little lodge and threw open the gates to let two horsemen pass out. One of the horsemen was Lord Holdham himself, a great landowner and a personal friend of the King; the other was his little son. They were bent upon a tour among the father's tenantry, and, though it was a beautiful day for a ride, on this occasion his Lordship did not relish the journey. There had been a good deal of grumbling of late, owing to the unfortunate season, and it is never so pleasant to have to do business with grumbling people as with people who do not grumble. Of course he could have sent his steward, but when things were not going well he preferred to visit the people himself.

From the mouth of a short lane they emerged upon a broad sloping meadow. Down this the animals went at a fine gallop, and as the air flew by the boy's face flushed with delight. One hand on his

hat, to prevent it flying off, he gave the rein to his pony, and away they went with ever-increasing pace across the meadow. 'Oh, what a lovely gallop!' cried the boy, when at last they had slackened to a more sober pace. 'I think——' But the sentence died away unfinished, for he saw that his father was not listening. He was preoccupied, and even that glorious gallop had not chased away the little expression of care from his face.

They now entered a by-road, which led to Farmer Sprout's, and in another moment were opening the gate to a bridle-path which led across his fields. As Lord Holdham stooped to lift the latch with his riding-crop, some one stepped from behind the hedge to save him the trouble. It was Farmer Sprout himself, and there was such a jovial smile upon his face that the landlord seemed unable to avoid reflecting it on his own. The expression of care that his son had seen faded away altogether, and the business talk he had with Farmer Sprout was much more cheerful and satisfactory than he had expected it would be. They strolled together through the fields, and when at last they parted Lord Holdham said he wished all his tenants put as brave a face on things as Farmer Sprout did. He mounted his horse again, and as he and his son rode off they were followed by the strains of a jovial song the worthy farmer was troling as he walked away in the opposite direction. It was fanned about their ears by the pleasant breeze, and was such a charming tune that even Lord Holdham began to hum it himself, fitting the time to the ring of his horse's hoofs as they trotted along the road. It was the tune that Peter Wattlebury had heard the pedlar whistle as he trudged along to market.

* * * * *

The King was to hold a *levée* at the royal palace that night. As far as the eye could reach stretched the carriages of those who were anxious to pay their dutiful respects to his Majesty. It may seem strange that on such a day as this the King should feel tired, and long that he might be left at peace for a little while; but that is exactly what he did feel. State functions had demanded his attention very much of late, and a little rest would have been very welcome. Now, it happened that a short time before the hour for the reception came his Majesty strolled into the royal library, and was stealing a few minutes at his favourite books, when from the other side of a screen he heard the humming of a human voice. The sound was so low at first that it failed to attract his attention, but by - and - by it turned into a melodious whistle, though still very faint, as if the performer was conscious that he was in the royal chamber, and yet was too pre-occupied by something else to be fully aware that he was making a noise. The King put down his book and listened. It was not a bad tune. In fact, it was rather a pretty tune, and he hardly liked to move for fear of interrupting it. Little by little the sound increased in volume, until the King began to smile, but as much with pleasure at the charming music as with amusement at the liberty which was being taken with his library rules. He had nearly forgotten the tiresome *levée*, and rose at last, with almost a laugh upon his lips,



From a Pedlar to a King.

to peep behind the screen. 'Ah, my friend,' said his Majesty, full of smiles, holding out his hand, 'you have come in good time for my *levée*, and rewarded me with a pretty musical performance.'

Lord Holdham started at the voice and, covered with confusion, bowed to the King. His Majesty's spirits had improved, and the *levée*, though a tire-

some affair, was not so *very* tiresome; and when at last it was over he sought his bedchamber with less weariness than he had expected. The day had come to an end, and the noisy world had grown quiet for a short space. As the King lay back on his pillow he caught himself humming the tune he had heard in the library. Sleep must have



“The Highland lad beat till he made the hills resound.”

tripped along to that tuneful measure, for the murmur soon ceased upon the monarch's tongue, and the little bud of song which had opened in the summer morning, when the poor pedlar whistled on his way to market, thus folded its petals, when the summer night had fallen, in the chamber of the King.

THE DRUMMER'S WARNING.

ONE of the Jacobite chieftains proscribed by Government after the battle of Culloden, was McPherson of Cluny, the head of one of the most numerous and important clans in the Highlands of Scotland. This chieftain, Cluny of the '45, as he is

called in the district of Badenoch, hid for a long time in the neighbourhood of his home, protected by the courage and vigilance of his loyal clansmen. He had a number of hiding-places, besides his skilfully contrived 'Cage,' as it was called, a hut formed upon the steep side of Ben Alder, by weaving the branches of trees together in such a fashion that the whole looked like a growing thicket. In this strange resting-place Prince Charles himself was concealed for some time, while waiting for tidings of the ship that finally conveyed him to France. The clansmen of Cluny had a system of conveying intelligence, by means of which their chieftain was warned of the neighbourhood of the King's troops; but he had several hairbreadth escapes of being taken.

On one occasion, believing the coast to be clear, he ventured to visit his wife at Cluny Castle, and to pass one night in comfort under his own roof. He was aroused in the morning by a terror-stricken servant, with the news that the Hanoverian troops were surrounding the house. Cluny, with perfect coolness, quieted the panic of his household, put on a kilt and coat belonging to a servant, and resolving to trust to the chance of the search-party not knowing him by sight, walked boldly out of the house, and offered to hold the horse of the officer in command while the castle was searched. The daring expedient was perfectly successful. Cluny Castle was searched from garret to cellar, while its master stood at the officer's bridle rein, and the party rode away unsuccessful, the leader giving a silver coin to the shabby-looking Highlander.

On another occasion, a search party surprised a lad carrying a hot dinner, suspiciously appetising for any one in that poor neighbourhood, and so confused him with their questions that they extracted the information that it was intended for Cluny. With a pistol to his head, the lad was ordered to conduct the party at once to the hiding-place of the chieftain. He consented, and led the way, by a rough mountain-track, to the cave where the Jacobite was concealed. On the way, the Highland lad chattered to the soldiers in so simple a fashion that they began to think him half-witted. He admired their arms and accoutrements, questioned them about their manner of fighting, and was specially interested in the drum. The drummer-boy, to satisfy his curiosity, showed him how it was played, on which the Highland lad, seizing the drum-sticks, beat the drum till he made the hills resound, shouting with delight at his own performance. Shortly afterwards the cave was reached, but the late occupant was already far away, warned by the drum of the soldiers' approach, and saved once again by the ready wit of his young clansman.

THE DUKE OF YORK'S COLUMN.

SOME of the readers of *Chatterbox* have probably seen with their own eyes the Duke of York's Column, and it is familiar to others by appearing in views of the West End of London. Not far from the famous Nelson Column, it stands, an imposing object, on rising ground, in Carlton Gardens, Pall Mall. When I was a boy, I mounted the many

steps leading to the top of the column, for it is unlike Nelson's in having a gallery, which, on a clear day, gives a splendid view of London for miles round. Many years ago, day and night, a sentinel of the Foot Guards paced in front of the column, keeping watch, but this has now been given up. Of course, nobody thought the column really required to be protected; the sentinel was put there as a mark of respect to the Duke, who was a great general in his time.

The column is of strong Scotch granite, and rests upon a foundation very carefully made by removing all the loose earth, and filling up the opening with concrete. Upon the top of this were laid huge slabs of Yorkshire stone to support the column. The column itself is one hundred and twenty-four feet high, and took about two years to complete, the cost being just upon sixteen thousand pounds. People ascend to the top by a spiral staircase, consisting of one hundred and sixty-eight steps, which are only two feet four inches wide, but are well lighted by little windows. Seen from the roads below, the statue at the top of the column is not remarkable, but when we have mounted to the gallery, we discover that it is thirteen feet high. It represents the Duke of York in the robes of the Order of the Garter. The weight of this figure is over seventeen tons, and the lifting of it to the gallery was a very formidable enterprise. By means of ropes and pulleys, the statue safely reached its resting-place. The work of raising it, begun at eleven in the morning, was finished at six in the evening, no one taking any harm. CRIS.

SKY REFLECTIONS.

ONE day as through the streets I passed,
And downward cast my eyes,
I saw a pool of water bright,
And in it was a lovely sight
Reflected from the skies.

A tender firmament of blue,
With clouds that sailed along,
And all the wonders of the sky
Passed one by one before my eye,
And kept my vision long.

In truth it was a lovely sight :
No sky could be more clear,
And sweet the lesson that it brought,
For by that sight my mind was taught
This wisdom sweet and clear :

Though things of earth demand our care,
They still may lovely be,
Illumed with a Heavenly light,
Full of reflections fair and bright,
And beautiful to see.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 114.)

CHAPTER XII.—SLOPER AND THE CABLE.

'COME in,' cried the captain, looking up from his log-book.
Teddy entered, followed by Marley.

Teddy was flushed and looked desperate. 'If you please, captain,' said he, 'I must speak to you; this can't go on any longer—'

'What do you mean?' cried the little captain, drawing back, for he almost thought for a moment, from the lad's manner and words, that he was deranged.

'We have a murderer on board, sir.'

'Oh, ho!' said the captain, 'what do you know about it?'

'First Stevens went, sir, and now Adams. There were only three Englishmen amongst the crew to start with, Stevens, Adams, and Jobson. There is only Jobson left now.'

Captain Sprott stared at the flushed face of the boy before him. 'What's this you say?' said he.

'I say, sir, there is a murderer on board, and we are all in danger of our lives, for those foreign sailors are going to rise and take the ship. I don't know why and I don't know when, but they will do it. If you'll listen to me, sir, I'll tell all.'

'Go on,' said Captain Sprott in a grim voice.

'It's this way, sir: the night before we started, Dick Mar'ey, here, and I went to the Hippodrome, and beside me two Spanish fellows were sitting. I heard them drop the name of the *Kingfisher*, and I listened. I heard one fellow say to the other that no lives were to be taken, and the other fellow said it couldn't be helped if there were.'

'Well?' asked the captain.

'Well, sir, you have seen what has happened already, but that's not all. Do you know, sir, who one of those Spanish chaps was? It was Don Alvarez. I recognised him at once when he came on board.'

The captain stood speechless; then he said, 'You mean to dare to imply that Don Alvarez, the Brazilian Commissioner, has had a hand in the disappearance of Stevens and Adams?'

'Yes, sir,' said Teddy boldly; 'not with his own hand, but by giving orders to others. I saw him talking to the Russian Finu last night, and—'

'Am I awake or am I dreaming?' said Captain Sprott. Then bursting out, 'Do you know what you are talking about, sir? Do you know that you have come into my cabin to accuse the Brazilian Government representative of murder? Do you know the consequences of your acts, or shall I have to put you in irons?'

'I wish you'd put me ashore, sir,' said Teddy. 'I haven't come here for the fun of the thing.'

'What O'Brien says, sir,' said Marley, now stepping forward 'is perfectly true. I was at the theatre with him.'

'Did you hear this conversation?'

'No, sir.'

'Did you see these Spaniards?'

'No, sir; I was looking at the show.'

'Just so,' said Captain Sprott; 'and you would have me put the Brazilian Government Commissioner under arrest and put back to port with him on account of a cock-and-bull story told by a boy whose conduct has been an outrage against the order and proper working of the ship since he joined. Get out of this, both of you; and listen,

if you breathe a word of this rubbish to any one, I'll confine you both to your cabin on bread and water till the cruise is over. As it is I shall make a very serious report to Mr. Roberts.—Come, go!' and they went.

Captain Sprott did not believe in O'Brien's story. What is more, he did not wish to believe in it. Had he credited it, he would have found himself in a very uncomfortable position. On an expedition of this sort, though the captain is responsible for the working of the ship, the Government representative is the real head of affairs, yet, technically, the captain is a greater power than the Government man. The captain could put the Government man in irons if he chose, but he would have to answer for his actions when he got ashore.

What Captain Sprott ought to have done under the circumstances was to put into Teneriffe Harbour for a court of inquiry on the bare facts of the case and O'Brien's sworn testimony. What he did was to enter the facts in his log, and write a long memorandum about O'Brien in his private notebook.

'Well,' said Teddy, when they got on deck, 'that ends the matter as far as I am concerned. The best thing that can happen for me now is for Alvarez to succeed. I know Sprott, and I know he means to get me the sack from Roberts, and he's got enough against me to do it. First, I swing a longshoreman on board, boat and all. Then I "disgrace" him before the Brazilian representative; then, I accuse people of murder. Oh, I can hear him talking to Roberts, and Roberts is a good sort, but dead nuts on discipline. I'm done for—come and let's see if the shark is there still.'

They went to the after-rail, and Teddy looked gloomily at the shark still following the ship.

It was an evil-looking beast, but Teddy could not help being fascinated by its persistence and the ease with which it moved through the water.

As Teddy stood looking, the motion of the ship suddenly ceased and from forward came a snorting sound as if a grampus were blowing.

'That's the picking-up gear at work,' said Teddy; 'they must have got the cable—let's go forward and look.'

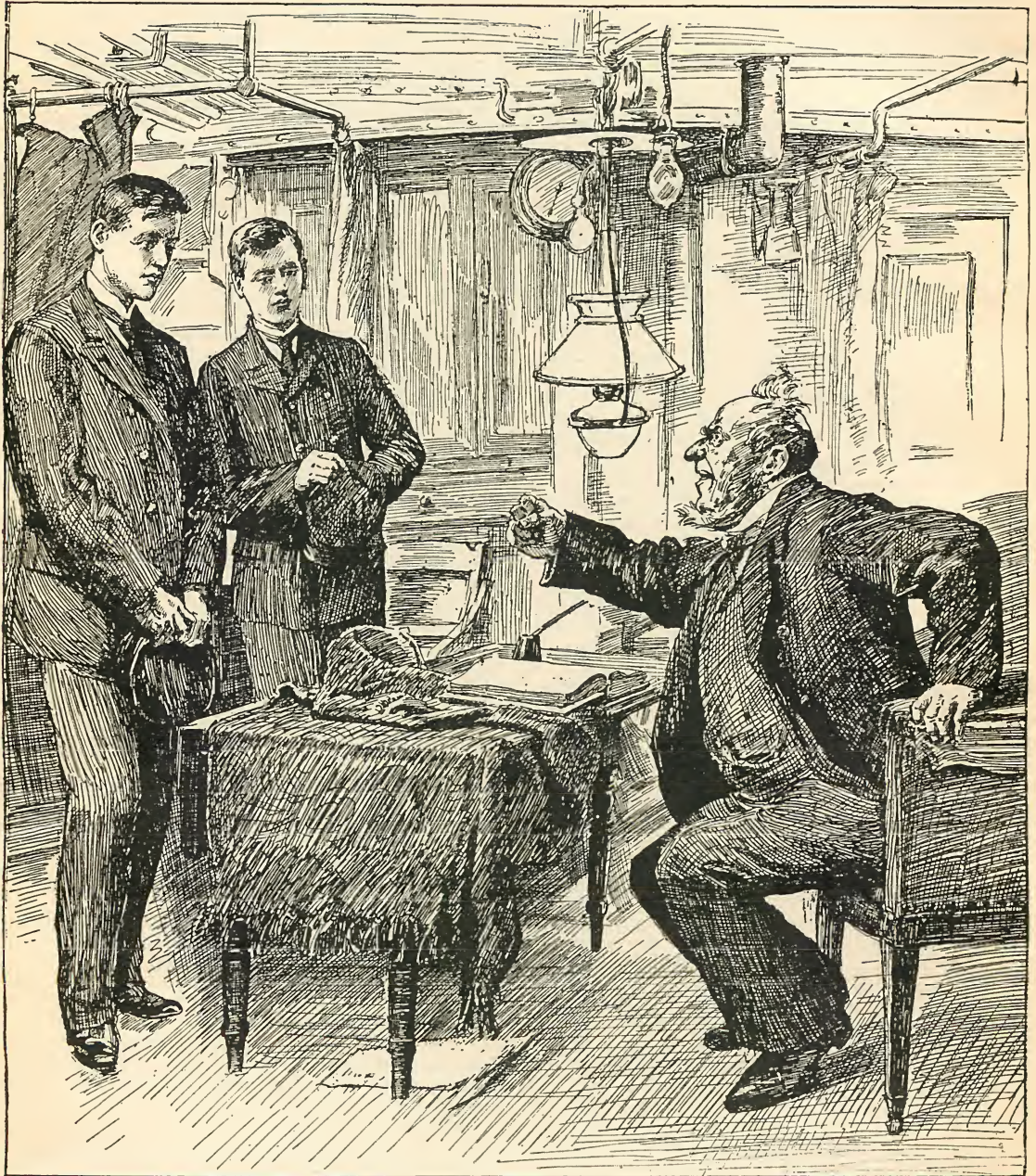
Mr. Toms was standing on the bow-balks, and the great drum of the picking-up gear was slowly revolving, hauling up the dripping grapnel rope. The dynamometer under which the rope ran registered a strain on the rope of three tons and a half.

There was a mile of wire-woven rope out, and the weight of the grapnel and a mile of such rope in sea-water is about three tons; the half-ton extra represented the weight of cable already lifted from the bottom of the sea.

Just here, coral of a sort is very abundant: it grows on the cable and 'glues' it down. Mr. Toms knew this, and therefore he picked up very slowly.

Sometimes he would stop the picking-up gear altogether, and leave the motion of the ship, as she rose and fell on the swell of the sea, to break the cable up gently from its coral attachments.

(Continued on page 130.)



“Do you know the consequences of your acts, or shall I have to put you in irons?”



A RAGAMUFFIN.



A Young Negro Archer.

PICTURES AND THEIR PAINTERS.

From the Wallace Collection, London.

IV.—REMBRANDT.

ABOUT the year 1607, in the quaint city of Leyden, was born the greatest painter of Holland, and one of the greatest of the world. Rembrandt van Ryn (of the Rhine), as he sometimes signed himself, in remembrance of his birthplace, where the two branches of this great river separate, was the son of a miller, and it is interesting to know that this famous Dutchman spent his early years in one of those mills which are the most characteristic features of a Dutch landscape. It has been thought that he first studied those wonderful effects of light, which we know so well in his pictures, from the long rays of sunshine striking from above into his father's mill. Rembrandt, like Frans Hals, lived in the golden age of Holland, when the country had just thrown off the Spanish yoke, and was rejoicing in a new, vigorous life of her own. But Rembrandt was quite unlike the careless, happy-go-lucky Hals. He was an untiring worker, so absorbed in his art that, as one of his pupils said, a king who interrupted his painting would have been obliged to wait, or told to call again. He painted the things he knew, and the people he saw every day, traders and citizens' wives, beggars at the street corners; above all, the members of the little household at the mill, not forgetting the one model who would always sit to him in the looking-glass. Again and again he studied his own face (a portrait of which appears on page 133), laughing and grave, in youth and old age, now in his working-day attire, now dressed out in the fantastic caps and turbans in which he had a fancy for arraying his sitters. Another favourite model was his mother, whose face is almost as familiar to us as his own, and how lovingly he cherished her memory we know from the fact that his two little daughters, who died in childhood, both bore her name of Cornelia.

After a short and not very successful course of classical study at the famous University of Leyden, young Rembrandt laid aside his books to devote himself only to art, and in 1631 he went to live at Amsterdam. The busy seaport town brought him new models to study, and perhaps he found, among the strangers on the quays, the subject of our illustration, one of those negroes whom he loved to paint, newly landed from some treasure-laden vessel from the wonderful, new-found Western world.

He soon became famous as a portrait-painter, and had as much work as he could do, receiving large sums from his sitters, and indulging his taste for collecting quaint and beautiful things, jewellery and Eastern ornaments, which constantly appear in his pictures. As an etcher he stands in the very front rank, making his black lines convey the effect of light and shade, cloud and sunshine, as he does with brush and colour. In 1634 he married the plump, fair, sweet-faced girl whose face he has made so familiar, Saskia van Uhlenborch. The bride was a well-to-do little maiden, and brought her husband what was esteemed a handsome dowry, and Rembrandt loved to paint her decked out in rich stuffs and costly jewels.

Those must have been good days, when the painter's popularity was at its height, when pupils

and sitters flocked to the house in Amsterdam where fair-haired Saskia kept house among the costly engravings, curios, shells, and stuffed animals which adorned the rooms. But the good time was sadly short. Gentle Saskia died, after eight years of married life, and her husband's popularity was short-lived too. Perhaps he was too original and imaginative for his stolid, practical countrymen. We know that one of his finest pictures, the portraits of the Banning Cock Company, the civic guard of Amsterdam, failed to satisfy the men for whom it was painted. They would have preferred something more conventional, a group of portraits like those of Frans Hals, showing them seated, in their bravest array, round their banquetting-table. But Rembrandt chose to depict them hurrying out through a dark doorway into the street, as if suddenly called to arms, a wonderful picture, full of life and stir, in which, as it has been said, you can almost hear the beating of the drums. Certain it is that, from that time, the painter's popularity declined. Then came money difficulties, of which we can hardly tell the cause. Times were bad, after the long war, and perhaps our painter was extravagant in the purchase of all those beautiful and curious things, which made his house a veritable museum. At any rate, the day came when they had to be sold to pay creditors, and Rembrandt was bankrupt, with old age coming upon him. He still worked as vigorously as ever, and even now could paint his own face, laughing as if in defiance of ill-fortune. But the shadows fall very darkly over those last days, when he lived where and how he could, indebted to a few faithful friends for the commissions which kept him from starvation. His only son died before him; he was out of fashion, forgotten and neglected, and in the year 1669 we find the simple notice in a church register concerning the man whose pictures are now amongst the wonders of the world, 'Died, Tuesday, October 8th, Rembrandt van Ryn, Painter.'

MARY H. DEBENHAM.

THE TIDE.

I SAW the tide flow in the bay,
Where the small vessels stranded lay,
And as the waves came flowing on,
The boats were floated one by one,
And gently rode upon the wave,
A little fleet, all sweet and brave.

So when the tides of Love flow in,
And through the heart their sweet way win,
All thoughts and moods the influence feel,
Warm currents through the nature steal:
Feelings that no power else could move
Are freed by the sweet tide of Love.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 127.)

THE Kipper was standing close to Mr. Toms; every now and then he would put his ear to the taut grapnel-rope.

'Look at the Kipper!' said Teddy. 'He can tell by

listening to the rope whether it is cable we have hold of or not—and I say, look at old Sloper!’

The monkey, who had been playing about near Mr. Toms, was now catching hold of the rope, and had his ear to it in exact imitation of the Kipper.

No one laughed, for it was the accustomed thing for Sloper to pretend to superintend when the cable was being got on board. The instant he heard the snorting of the picking-up gear, he dropped whatever he might be doing and went forward, where he remained till the cable was on board.

The men liked to see him there, for they knew that as long as the cable was coming safely up, there Sloper would remain, for the beast had some strange instinct that told him if the cable were slipping off the grapnel, or if any accident had happened to it: then he would disappear aft.

Mr. McGrath had brought his green parrot up, and the cage was hanging in the sun safely out of Sloper’s reach. Marley looked out over the sea to where Heiro was floating in a faint haze.

The sea was absolutely the colour of Reckitt’s Blue as we see it represented on the posters; there was not a ripple of wind on it. Away to the southward lay an inter-island coasting schooner becalmed, and casting a long white reflection on the water.

Gommera and its purple cliffs had drawn further away, and looked more fairy-like, whilst Teneriffe, away down south, had attracted a veil of summer mist from the sea, above which the peak appeared cut off from its base, and looking like an island floating in the sky.

‘What’s that island over there?’ asked Marley, pointing eastward to an island more beautiful than any of the others, because more green.

‘That’s Palma,’ replied O’Brien. ‘I landed there once. There’s always a big surf on. The boat upset, and we were all capsized out of it except one man. The boat turned turtle, you know, and floated like that with the chap under it. There was air enough for him to breathe, and he came gaily ashore—at least, the boat did. When we scooped him out like a periwinkle, he made a bolt for the hills shouting “Thieves!” and didn’t stop running till he was half across the island—lost his head, you know.’

‘That reminds me of *Pickwick*,’ said Dick. ‘D’you remember where the chap tumbles through the ice into the pond, and old Tupman runs across the country shouting “Fire!”? Hullo! look at Sloper! Oh, botheration!’

Sloper was creeping aft. All the time they had been talking the drum had been slowly revolving, dragging the grapnel-rope in; the dynamometer had been rising, slowly and surely, in the way beloved by the cable engineer. And now Sloper was going off, and the dynamometer was beginning to fall.

The strain had slowly risen to five tons and a half—that is to say, two tons’ weight of cable had been lifted free of the bottom, and now the dynamometer only registered a strain of five tons; a minute later it had fallen to four tons. Every one knew what was happening down below as well as if the water had been plate-glass and they were watching it.

The cable was slipping off the grapnel. It is the

most irritating occurrence that can happen in cable work. Tie a piece of string some yards long to the leg of a table, and let it lie along the floor; hook your finger under the string a few inches from the cut end, and try to lift it. You can lift it for a little distance, but you will soon find it slip off. This was what was happening to the cable.

‘A grapnel sometimes hooks a cable by one prong, and that’s what ours has done,’ said Teddy. ‘It ought to have got it by two prongs. I’ve seen a cable caught and tangled in all three prongs. Now, a Benest patent grapnel nails a cable in such a way that it *can’t* slip off; but we’re using an old simple three-prong grapnel, and the cable is making a fool of it.’

‘Why don’t we use a Benest grapnel?’

‘Because the bottom of the sea just here is not suitable. There, the dynamometer is down to three tons!’

The picking-up gear gave a snort as if of disgust, and began winding up the grapnel at a furious rate.

The cable was gone.

Every one not connected with the work on hand walked aft. No one spoke about the disappointment; it is not etiquette to do so. No one grumbled, even to himself. If you once started grumbling on cable work you would grumble yourself ill in a week.

The ship was turned, she steamed back to the first mark-buoy, and the business was begun all over again.

‘Well,’ said Marley as they walked along the deck towards the paying-out office, ‘if Mr. Toms doesn’t admit that Sloper has brains now, he will never admit anything reasonable in his life.’

‘He will say it’s instinct; he always does when Sloper proves himself the better cable engineer of the two. I don’t care what he does, or what Sloper does, or what any one does. *I’m* done for. I shall get the sack as sure as nuts when we get back from this expedition, and a nice thing it will be to tell the poor old governor.’

‘You won’t get any such thing,’ said Marley. ‘I will see Roberts and explain.’

‘My dear fellow,’ said Teddy, ‘you will be represented as a confederate of mine; trust Sprott for that; he will have first word with Roberts, and when you go with your yarn, Roberts will listen to it very politely—he is awfully polite, is old Roberts—and he will say, “Thank you, Mr. Marley; thank you very much indeed. I will make a note of your statement, and the matter will be dealt with officially.” That means a letter from the firm telling me to go to Timbuctoo.’

They went down to luncheon, and after lunch Marley, tired of the sun and dazzle of the sea, got a book and lay down on the couch in the saloon and began to read.

He had not been reading long when he fell asleep.

Then he dreamt that he was at the bottom of the sea, being pursued by marine monsters. Sloper was with him, skipping and running at his side. Then, all of a sudden, he ran into Paddington Station, a grapnel at the end of a rope crashed through the roof and caught him round the middle and began to haul him up; he felt as if he were miles long and only an inch or so thick—a cable, in fact—and he



"He slipped off—on to the floor of the saloon!"

was slipping off the grapnel, slipping off till at last he slipped off—on to the floor of the saloon!

Jones was drinking a cup of afternoon tea.

'Been having the nightmare?' said Jones. 'If you *will* tuck into plum-duff the way I saw you

do at lunch, and then go asleep with a heavy book on your chest, it's all you can expect. They have got the cable at the bows—hurry up and you will be in time to see them haul it aboard.'

(Continued on page 142.)



PICTURES AND THEIR PAINTERS.

REMBRANDT VAN RYN.

A DROP OF BLOOD.

WHOEVER would suppose that anything interesting could be said of such a thing as a drop of blood? I imagine I hear some of my readers say, 'What a disagreeable subject!'

Nevertheless, there are more wonders in a drop of blood than most people would imagine. Of course, at the mere mention of blood everybody thinks of red blood. Yet blood is not of necessity red, for some of the lower animals have colourless blood, and some, like certain 'shell-fish,' have blue blood. This last

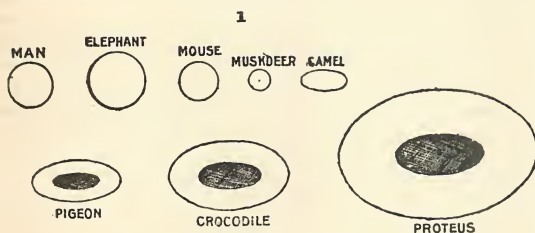


Fig. 1.—Relative sizes of blood corpuscles.

fact is of interest, since it shows, once more, how many a thing said half-jestingly proves after all to be true in some respect. People, for example, commonly speak of those who are able to trace their ancestry back for many generations as 'blue-blooded,' knowing well that such is not actually the case; but, as we have just pointed out, some creatures are actually 'blue-blooded.'

But what is 'blood,' and why is it red in all the higher animals?

As to the first question, blood is the fluid which circulates throughout the bodies of animals, distributing the life-giving oxygen and nourishment to

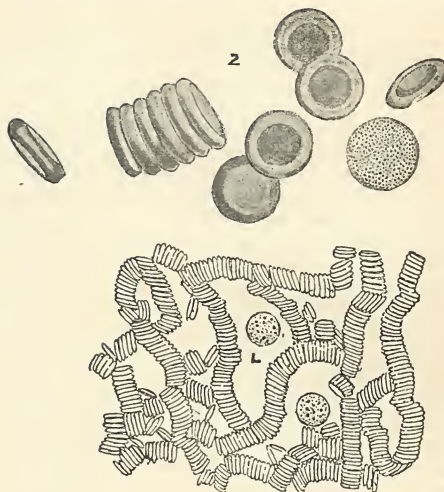


Fig. 2.—A drop of human blood, highly magnified; the upper portion shows both the red and white corpuscles still more highly magnified.

the tissues of the body, and it also serves to rid the body of poisonous gases.

Let us, for clearness' sake, confine our further

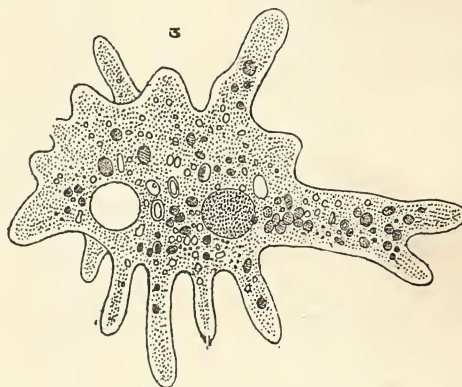


Fig. 3.—The Amoeba.

remarks to the blood of the higher, back-boned animals, such as the fishes, frogs, reptiles, birds, and



Fig. 4.—White blood-corpuscle eating a bacterium.

mammals—these last including, as many of you know, not only horses, dogs, and so on, but also man himself. Well, in all these the blood is red,

except in some very young fishes, which have colourless blood. Why this should be we do not at present know, nor exactly what causes bring about the change to the red blood of the grown-up fish.

Let us suppose that we have put a drop of blood of, say, a pigeon under a microscope; what shall we see? The first peep down the tube will give a surprise, for nothing in the nature of red is to be seen. Recovering from this surprise, and settling down to careful observation, the first thing noticed will be thousands of oval bodies, or 'corpuscles,' flattened from side to side, and each containing a central spot darker than the surrounding parts. This dark body is known as the 'nucleus,' or kernel of the corpuscle, for each of these bodies is known as a corpuscle. (See fig. 1: Pigeon.) The corpuscle has been found to have a sponge-like structure, in the meshes of which the colouring matter of the blood is contained. The colouring matter, which now appears of a pale straw-colour, is known as 'hæmoglobin,' a terribly long word, but a useful one. Now this hæmoglobin has some mysterious power of absorbing or soaking up the oxygen from the air which has been drawn into the lungs in breathing, and, to obtain this, every drop of blood in the body is made to pass through the lungs in the course of every minute or so throughout the bird's whole life. The journey is made by way of excessively delicate tubes—the blood-vessels—and these vessels have such thin walls that the air contained in the air-chambers of the lungs can pass through to the blood, and, in doing this, the blood gives out the poisonous carbon dioxide, or carbonic acid, as it is commonly called, and takes in oxygen. The carbonic acid is got rid of by the breath, while the newly-refreshed corpuscles pass back again over the body, giving up the oxygen as they go, in order that this gas may burn up the waste products formed there. The blood which passes over the intestines soaks up a great deal of the digested food which the intestine contains, and carries this nourishing matter away to feed the body, to make bone and muscle and fat—to make us grow, in fact.

These blood corpuscles, we must further remark, are carried about by means of a clear fluid known as the blood plasma. When seen through the microscope then, the drop of blood is made up of two parts—the blood plasma and the 'red' corpuscles. But, you will remind me, under the microscope they are *not* red. How is this? If you take a drop of vermilion red, or of red ink, and let it fall into a glass full of water, it will seem to disappear. It does not really, but the particles of red are now so widely separated that they no longer appear red. And so it is with the blood: the corpuscles, which are of a very pale red, when widely separated by the magnifying power of the microscope, cease to give the effect of red. It is only when they are seen with the naked eye that the red effect is produced, for the eye is not powerful enough to make the corpuscles appear separated.

But besides the red corpuscles, this blood plasma carries yet other wonderful bodies. These (fig. 2 *L*) are known as the 'white corpuscles,' or 'leucocytes,' a word which means white or colourless cells.

These serve quite another purpose. If you watch them carefully, you will see that they slowly crawl about by sending out slender feelers, and then drawing the rest of the body after them. They are, in fact, exactly similar to the lowest of human organisms known as 'amoebæ.'

Now the amoeba (fig. 3) has no mouth, stomach, nor digestive organs; it is simply a blob of living jelly, able to distinguish, in some mysterious way, what is good to eat. As the creature crawls about, the body is drawn, more or less accidentally, over particles of food—other living organisms, such as microscopic plants. In passing over what is good to eat, the morsel is drawn up into the jelly and digested. The white corpuscles of the body perform a similar but stranger work, for their business is to eat up all matter which, entering the body, is likely to prove injurious. In fig. 3 you will see an amoeba taken from the bottom of a pond, containing microscopic plants known as diatoms and desmids (see p. 13), which have been 'swallowed,' and a white blood corpuscle (fig. 4) containing another microscopic plant known as a bacterium; but of this more presently.

The 'red' blood corpuscles of different animals vary greatly in their relative size, as you may see in fig. 1. The musk deer, you will note has, relatively, the smallest; the newt-like proteus, the largest, though the largest of them are infinitely smaller than a pin's head! But those of the mammals differ from all the lower vertebrates in that they have no 'nucleus,' or central body.

In a drop of blood, drawn, for example, by the prick of a needle from one's finger, these red corpuscles will be found to arrange themselves rapidly in little heaps known as 'rouleaux,' from their likeness to little heaps of coins (fig. 2). This they do by mutual attraction. But in between the mesh-work formed by these heaps will be found white corpuscles, exactly like those described already, but which have here rounded themselves up, so to speak. These play a most important part in our lives. They are, so to speak, the police of our body. When, by some mischance, we fall a prey to hosts of disease germs, such as cause fevers, for instance, these white corpuscles set about attacking and devouring the invaders. Should they prevail, we recover; should they fail, we die. It is the doctor's work to give us medicine which will help the corpuscles in their task; but he can do no more than this. But, strange to say, these all-powerful corpuscles perform yet other work. As old age steals on us, they mount the hairs of our head and eat up the colouring matter there, and thus our hair turns white, and later still, acting under some strange influence, they attack the body itself, the body which for years they have so jealously and successfully guarded from outside enemies, and thus they help to bring about the final downfall of our earthly tenement! After this wonderful history, who will say that a drop of blood is uninteresting?

W. P. PYCRAFT, F.Z.S., A.I.S.S.

HE who is master of himself is the best person to master others.—*Old Proverb.*

MR. SAMPSON'S JOHNNIE.



AM sorry, my boy,' said the doctor to his small son, 'but Nannie is not well enough for the circus this afternoon. You must go alone.'

Leslie's face fell. 'Poor Nannie! she will be awfully disappointed. There's such a splendid clown. Father, couldn't she wrap up very warm?'

Dr. Ommany smiled. 'If Nannie is to see the circus, it must come to her; she cannot go to it.'

He was getting into his overcoat as he spoke, and his motor was at the door. He turned back to say, 'There is no reason why you should not go. We can give Nannie a treat another time to make up.' Then he shut the door, and with much hissing and fussing the motor started.

Leslie went slowly upstairs. It was not much fun to go off to a circus alone, to laugh by yourself, when you knew your sister was kept at home by nothing worse than 'a beastly cold.' Of course, if she were really ill, he would not think of going; it would be 'jolly mean.'

Then an idea came into his head, and he darted up the remaining stairs and banged into the nursery. 'Nannie, I have a lovely plan!' he exclaimed.

Nannie replied with a volley of sneezes. 'Wha—wha—what is it?'

'Look here, I'm going to the circus; Father told me to go. You don't mind, do you?' he said.

Nannie shook her head vigorously. She had not the smallest desire that he should stay away for her sake, being a generous little soul, and knowing that he would stay if he were asked. 'No, no; you go, and then you can tell me all about it,' she said.

'I'll do more than that,' he replied solemnly. 'Father said, "if you were to see the circus, it must come to you." Well, I'm going to ask the clown to tea. Isn't it a splendid plan?'

Nannie clapped her hands. 'We will have plum-cake for tea, and I will wear my best pinafore.'

Leslie looked thoughtfully at her. 'It's a pity your nose is so red,' he said.

Nannie tossed her head. 'Clowns are used to red noses, and he will know it's only the cold. Are you sure you will be able to ask him?' she added, a sudden doubt seizing her.

'I'll manage it somehow,' said Leslie; 'and look here, don't tell Nurse or Cook till I'm gone, and be sure you explain that Father is quite willing.'

'Mr. Sampson,' the clown, was at his best that afternoon. His comical face and his absurd antics set the boys into roars of laughter. His solemnity when he asked the ringmaster riddles without any answers was even funnier. The ringmaster, a resplendent person, looked round the crowded tent with great satisfaction. The red-baize seats were

well filled. He felt fully justified in calling his entertainment 'high class and refined,' for Mr. Sampson never allowed his wit to become coarse and vulgar. He was really a valuable clown, and the ringmaster knew it.

After the most ridiculous antics with a piebald donkey, Mr. Sampson's somersaults carried him to the performers' exit, and he darted through to a perfect roar of applause.

Once outside his face straightened, and he made his way quickly to a caravan. As he mounted the steps, a weak voice said, 'That you, Dad?'

'Yes, it's I, Johnnie,' said Mr. Sampson, going in. Even here the applause could be heard faintly.

'Dad, is that for you?' asked the sick boy.

'I suppose so,' said Mr. Sampson indifferently. 'How d'you feel, Laddie?'

'It hurts awful when I cough, Dad; seems to tear me somehow,' he replied. Mr. Sampson sighed. 'Dad, you do look funny. Did the boys laugh?'

'Yes, they laughed a good deal.'

'I should have liked to be there, Dad,' wistfully. 'I suppose you couldn't be funny here to me?'

Mr. Sampson shook his head. Just for a minute he could not speak. 'No, Johnnie boy, I couldn't here to you.'

A paroxysm of coughing seized the boy, and he caught at his father's hand. The man watched him with grief-stricken face. When it passed, Johnnie said in a faint voice, 'Dad, you mustn't cry. The tears are messing up the paint on your face, and you have got to go back.'

'All right, Laddie. But don't talk,' said Mr. Sampson, stooping to kiss the boy's forehead.

Outside the caravan one of the tentmen heard that coughing. He shook his head. 'If Mr. Sampson's Johnnie dies,' he observed to the tentropes, 'Mr. Sampson will be spoilt for a clown, and he was always fust-rate—fust-rate.' Just then he stumbled over something and nearly fell. A small boy in an Eton suit, covered with bits of straw, rose up before him. 'Hullo, young shaver! What are you doing here behind the scenes?'

'I want to see Mr. Sampson, if you please,' said Leslie, very politely. 'Please will you take me to him, and there's sixpence for you.'

'Polite young gent,' thought the man. 'No harm in him; no, nor in his sixpence. Thank ye, sir,' he said, pocketing it. 'We're close to Mr. Sampson's quarters—this van.' He walked up the steps and knocked at the door. 'Mr. Sampson, young gent to see you,' and he departed, leaving Leslie on the top step.

Mr. Sampson, in surprise, opened the door.

'Oh, please Mr. Sampson,' blurted out Leslie, very nervous now that the moment had arrived, 'I've come to ask you to tea. You see, my little sister has a cold—a very bad cold, only it isn't influenza, or gastric catarrh, or laryngitis, or any of those things—just a really bad cold, so that she couldn't come to the circus; but she awfully wants to see you, and Father said that she could see the circus if it came to her. Of course, you're not all the circus, but you're the best of it; so please will you come?'

(Concluded on page 138.)



“‘I’ve come to ask you to tea.’”



“The door was flung open and Leslie cried out, ‘He’s come!’”

MR. SAMPSON'S JOHNNIE.

(Concluded from page 135.)

LESLIE stopped breathless, and Mr. Sampson smiled.

'What is it, Dad?' asked Johnnie in the back-ground: 'a boy?'

'Come in, sir,' said Mr. Sampson. 'It's only my little boy. He's ill too. I've got to go on again in five minutes; but I would like to hear again about this coming to tea, and your sister.'

Johnnie's eyes never left Leslie for an instant. It was almost as good as seeing 'Dad' make the boys laugh.

'I'm sorry you're ill,' said Leslie politely. 'It's horrid, isn't it? Nannie hasn't got to stay in bed, only in the same room, so as to keep in the same temperature. You see, her temperature is a little high. Is yours?'

'I don't know,' said Johnnie: 'I haven't seen a doctor—leastways not this time.'

'Oh!' said Leslie, turning to Mr. Sampson, 'why, my father is a doctor. He would make your little boy well. Do come. Tea is at half-past five, and you're expected. Nannie longs to see you act, and it was very hard for her not to come to-day—wasn't it?' he added, turning to Johnnie.

Johnnie nodded.

'Yes; but does your mother want me to come, sir?' asked Mr. Sampson, abruptly.

Leslie's face sobered. 'We haven't any mother; she died when Nannie was quite little.'

'That's like me,' said Johnnie; 'I've only Dad.'

Mr. Sampson was thinking. 'You're sure your father wouldn't object to my coming?' he asked, laying a hand on the boy's shoulder. 'You are not doing something wrong in asking me?'

'Oh, no!' said Leslie, looking up into the clown's face with honest, fearless eyes.

'Then, if Johnnie doesn't mind, I'll come. You see, it's his time really, tea-time between the two performances.'

Mr. Sampson looked at Johnnie, and Leslie looked eagerly, both awaiting his answer.

'I should like you to go and amuse the little girl, Dad,' he said bravely.

'Mr. Sampson! Mr. Sampson! your turn!' called a voice outside.

'I must go,' he said; 'and look here, young gentleman, go round by the entrance this time. Here, Sam, pass this young gentleman through,' he called to the man who had summoned him.

Leslie went up to Johnnie and took his hand. 'Thanks awfully,' he said; 'and I'm going to tell Father about you.'

Then he returned to his place, and was soon laughing heartily at Mr. Sampson's quips and cranks. But Johnnie turned his head on his pillow, and two hot tears fell on it.

Leslie could not help feeling a little important, for was not Mr. Sampson coming home to tea? When the performance ended, and the crowd were filing out, he wondered how he was to meet Mr. Sampson. He wondered still more who the tall man in the long overcoat, and high-boots like the ringmaster's, could be. A slouch-hat hid his face,

and when he came up to Leslie and said, 'I'm ready, sir,' Leslie was quite startled.

'Oh! are you Mr. Sampson?' he said. 'You don't look like it. You haven't taken off your clown's dress, have you?' he asked anxiously.

Mr. Sampson laughed. 'Oh, no, sir; I have only covered it up. We don't want a crowd at our heels, do we?'

'Oh, I see,' said Leslie, much relieved.

Nannie, looking out of the window, also received a shock when she saw the long overcoat and slouch-hat. 'Oh, Nursie, he hasn't brought the clown—only one of the riding-men, and he can't do things in the nursery; there's only the rocking-horse.'

Just then the door was flung open and Leslie cried out, 'He's come!'

Off came Mr. Sampson's hat to Nannie and Nursie, and there, sure enough, was the white and red face and top-knot of hair.

Nannie sprang forward. 'Oh! thank you so much,' she cried, holding out her hand.

'Johnnie let him come,' said Leslie, with the air of one possessing superior knowledge.

'Who's Johnnie?' demanded Nannie.

And while Leslie explained, Mr. Sampson walked up to Nurse. 'I hope it's all right, ma'am, my coming here? I should be sorry to get the young gentleman into trouble, but he's just about the age of my Johnnie, and, if I don't intrude, I'd be pleased to amuse the little lady.'

'Oh, that's all right, Mr. Clown. I'm sure we are honoured to have you. We take it very kindly, and the doctor will see it that way too.'

'I thought I might ask him to have a look at my boy,' said Mr. Sampson.

Nurse became very sympathetic.

It was a most successful tea. Mr. Sampson was beautifully funny, and his manners were irreproachable, and for these Nurse had trembled. Then afterwards he gave them the best of entertainments for half an hour, using the rocking-horse in place of the piebald donkey.

In the midst of it all a quick step was heard on the stairs. 'Hallo! hallo! what's all this?' exclaimed Dr. Ommany, in the doorway.

Mr. Sampson paused in his joking and said, very respectfully, 'I hope I did not do wrong, sir, to accept this young gentleman's invitation?'

Dr. Ommany burst out laughing. 'So you took me at my word and brought what you could of the circus to Nannie! Well, I'm sure,' turning to Mr. Sampson, 'it was very good of you to come: you are an important person, Mr. Sampson, and I can see you have made my little girl very happy.'

Nannie was clinging to her father's arm trying to say something. 'What is it, little girl?' he asked.

'His son is ill. Please, Father, won't you make him well, because it was good of Mr. Sampson to come and amuse me. It is really his time with Johnnie.'

Then Father changed into the professional man, and put certain sharp questions to Mr. Sampson. He would not wait for tea, but took Mr. Sampson back in the motor, and while the clown made the boys laugh inside the tent, the doctor sat in the yellow van with Johnnie.

'Pure air and good food, Mr. Sampson—especially pure air,' he said, later. 'Now, listen to me: I am on the point of opening a new open-air sanatorium up on the hill yonder. Leave Johnnie behind and he shall be one of my patients. I'll undertake to say that six months hence he will be a new man; but, on the other hand, your wandering life, this close van——' and the doctor shrugged his shoulders. Mr. Sampson half turned away from Dr. Ommany.

Somehow the doctor felt a pain in his throat: the dejected droop of the man's shoulders did not fit in with his grotesque clothes.

'I can't afford it, sir,' came Mr. Sampson's reply, very quietly, yet so full of meaning. He was uttering Johnnie's death-warrant.

'Oh, my dear sir,' exclaimed the doctor in a pained voice, 'never mind that; I don't want any payment. Come, give the boy his chance; I am interested, and you have been kind to my little girl.'

Mr. Sampson's only answer this time was to seize the doctor's hand in a hard grip.

So Johnnie was established in the new sanatorium, and Mr. Sampson continued his tour alone. Johnnie was very sore at parting with Dad. 'Shan't you be awful lonely, Dad?' he asked, anxiously.

'Oh, I shall get along,' said Mr. Sampson. 'I shall smoke my pipe again.'

Johnnie smiled. His father had given up smoking because it made Johnnie cough.

Dr. Ommany's interest in Mr. Sampson's Johnnie was both personal and professional. He grew fond of the boy, and he was proud of the progress he made towards recovery.

When Mr. Sampson reappeared in the town six months later, Johnnie was, indeed, 'a new man'; but Dr. Ommany would not give him up to his father yet. 'The work is only half done,' he said. So again Mr. Sampson went his lonely round.

Three years later Leslie and Nannie received a ticket for a box at Drury Lane Pantomime on the opening night, 'with Mr. Sampson's compliments.' Mr. Sampson had risen in the world—in fact, to the summit of his world.

Dr. Ommany took them up to London on purpose. Nannie's happiest moment was when Mr. Sampson waved his hand to her in recognition. 'It looked part of the performance,' she said; 'but I knew he really saw me, and he wanted me to know he knew.'

As they came out into the street afterwards, a man from the gallery audience caught sight of them. 'Good evening to you, sir. You are the doctor that cured our Mr. Sampson's Johnnie?'

Leslie sprang forward. 'I know you too! You're the man I gave sixpence to to take me to Mr. Sampson.'

'I am that, sir, and wasn't I saying then that our Mr. Sampson was fust-rate? And I'm saying it still. Get you a cab, sir? Here you are, sir—good-night, Missy—thank you, sir.'

When Mr. Sampson, now fairly well-to-do, sent Dr. Ommany a handsome cheque, he added a letter in which he said that money could not really pay for what he had done for Johnnie, and that he would never forget.

MAUD MORIN.

KEEP ON TRYING.

'OH, I shall never reach the shore,' a wavelet said one day,

'I've travelled right across the sea, but still 'tis far away;

I seem to go a little way and then fall back again, It's really no use trying—my efforts are in vain.'

But all the time the tide crept on with current swift and strong,

And the timid little wavelet with it was borne along, And ere the day was over it safely reached the land, And with a laughing ripple ran lightly up the sand.

'Oh, I shall never mount the blue and soar into the sky!'

So said a little lark one day with such a piteous sigh: 'My wings they are so small and weak; why, when I tried this morn,

I only got a little way above the growing corn.'

But day by day its little wings grew stronger and more strong,

And bit by bit it mounted higher, and sweeter grew its song;

Till in the bright midsummer a stranger passing through

Looked up, but it was out of sight, far in the boundless blue.

'Oh, I shall never reach the earth,' a little sunbeam said;

'Millions of miles it lies below—quite weary grows my head.

If I should travel morn to night, I never should get there,

And yet 'twould be a lovely thing some drooping flowers to cheer.'

And so it started for the earth, and came at such a rate,

It got here long before the bells had chimed the hour of eight;

It cheered the flowers, danced o'er the sea, made all things fair and bright,

And still found time enough was left to get safe home ere night.

EDIBLE ANTS.

THOSE very busy and abundant insects, the ants, supply food to many other creatures. A quadruped called the ant-eater is common in warm countries, and licks them up by hundreds. No doubt many birds feed upon them, and they also afford food to other insects of larger size.

In hot countries, where a variety of insects are eaten by some of the natives, ants are thought quite a delicacy. We have a notable instance in the great-headed red ant, which is abundant about the river Amazon. This species is a wonderful builder and very strong. When making their nests in woods or gardens, these ants turn up the earth into large heaps. A nest is sometimes nearly twenty feet square and a yard high. They have tremendous jaws, and after sunset they come by swarms into the houses, carrying off whatever they may fancy. Once

a year the female ants come out in great numbers; they have long bodies full of eggs, and the natives collect them in basketfuls. They are eaten alive, being held by the head and the fat body bitten off. Sometimes they are roasted, with a little salt sprinkled upon them, and even Englishmen have said that they do not taste bad. The natives also eat a large white ant, which is found near the roots of trees. Here it is not the female, but the hard-working ant which is selected. The flavour is rather bitter; the Indians, however, crunch them up with satisfaction.

A QUEER DOMINO BRIDGE.

IT seems wonderful that dominoes can be placed, as in fig. 3, without tumbling over. But it can be managed by carefully copying the other pictures.

The first one (fig. 1) is the important one; copy it exactly, and the rest will be found easy. When you have got as far as fig. 1, carefully remove the dominoes marked x and y; this permits the two end ones to drop slightly, as may be seen on looking carefully at fig. 2. Then give a gentle push on z to loosen the domino so marked, and the bridge is completed.

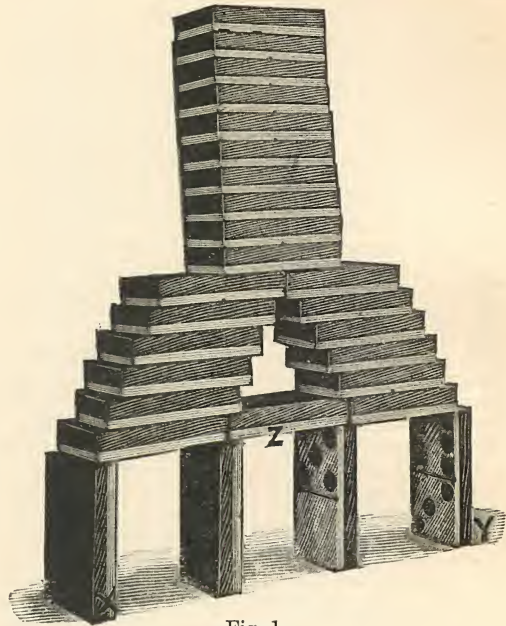


Fig. 1.

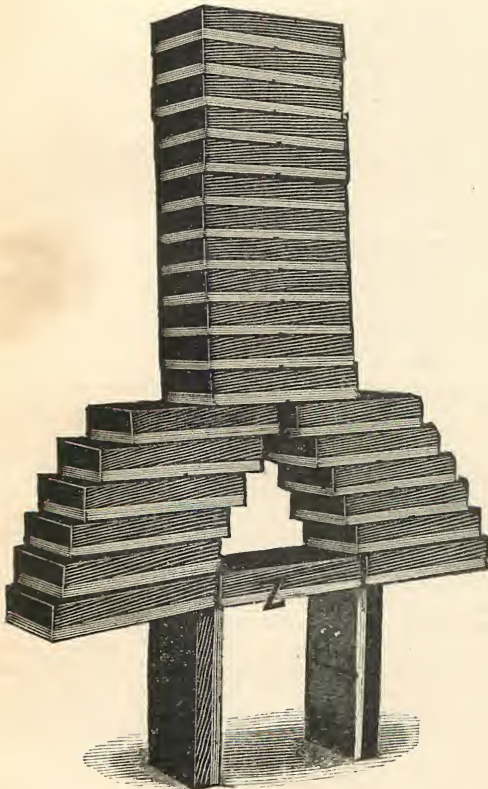


Fig. 2.

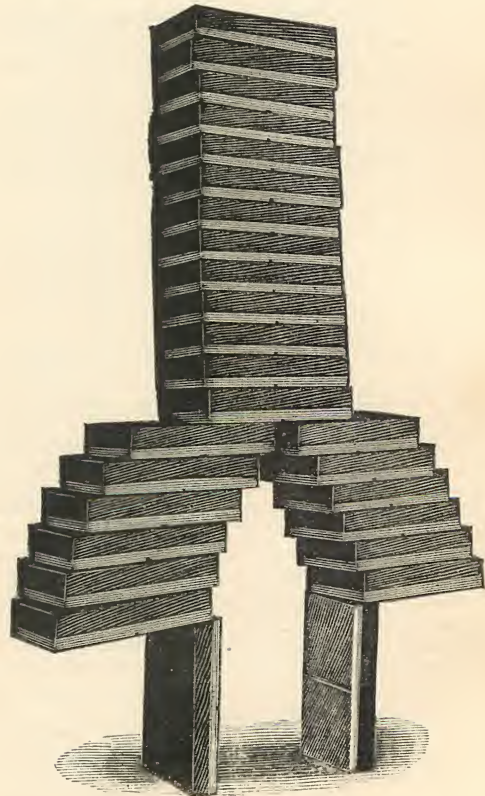


Fig. 3.



I.



II.



III.

A PAGE OF PICTURE PUZZLES. (See page 142.)

PICTURE PUZZLES.

NURSERY RHYMES.

I.—OLD MOTHER HUBBARD.

SHE went to the fruiterer's
To buy him some fruit,
And when she came back,
He was playing the flute.
Find the dog playing the flute.

II.—BO-PEEP.

Little Bo-peep has lost her sheep,
And cannot tell where to find them;
Leave them alone, and they'll come home,
And bring their tails behind them.
Find the sheep.

III.—BAA, BAA, BLACK SHEEP.

Baa, baa, black sheep,
Have you any wool?
Yes, little master,
Three bags full:

One for my master,
And one for my dame,
And one for the little boy
Who lives in our lane.

Find the master, the dame, and the little boy.

THE BAJU SALT-MAKERS.

THERE are many ways of making salt, but few are stranger or more instructive than that which is followed by the Bajus and other tribes who inhabit the northern part of Borneo, near the sea-coast. In this country a palm-tree, known as the nipa palm, grows in great numbers, and is used by the natives for many useful purposes. It always grows in salt water, either along the shores of the sea itself, or by the side of rivers and lakes, into which the sea flows at high tides. A considerable quantity of salt water is absorbed by the roots of the palm, and much salt lodges in them. This is the salt which the natives seek to obtain for domestic use.

They first gather together a number of the palm-roots, and having piled them into a heap, they set fire to it. The ashes which are left when the fire is burnt out are loaded with salt, which the fire has not been able to burn. A number of large iron pans, which have been purchased from Chinese traders, are half-filled with water and fires are made under them. The ashes of the burnt nipa palms are gathered into a heap and thrown into the water in the pans. The salt which is in the ashes is dissolved by the water, but the light wood-ashes rise to the surface and form a scum, which is removed with the aid of ladles or scoops. In this way the natives are able to separate all the wood of the palms from the salt which they contained, the salt remaining behind in the boiling water. By continuing the boiling they are able to separate the salt from the water, for the salt is left behind in the bottom of the pans, when all the water is boiled away.

The salt obtained in this way is not very white, and its taste is rather bitter, because there are a few impurities still left in it. But it is quite wholesome, and is sometimes better than salt obtained from other countries.

Having learned the way in which salt is made by the people of northern Borneo, it is interesting to notice one or two other points, which we can now better understand. In some places not only are the roots of the nipa palm burnt to make the ashes, but any wood which has been floating in the sea, and become soaked with salt, is also placed in the fire. Sometimes the men who are burning the wood throw salt water upon the fire. They are careful, of course, not to throw on sufficient to put the fire out, and as the fire goes on burning, it evaporates the water, and the salt is left behind along with the salt in the wood itself. Sometimes these ashes are placed in baskets, and the water which is to carry away the salt is passed through them, before it is put into the boiling-pans. As the baskets retain the larger pieces of burnt wood, there is not then so much scum to take from the water in the pans. Lastly, much of the work of salt-making is carried on in large sheds, probably to prevent any of the salt being washed away by rain, which would certainly sometimes happen if the work were done in the open air.

W. A. ATKINSON.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 132.)

CHAPTER XIII.—THE PISTOL OF DON ALVAREZ.

IT was a fact; whilst Marley had slept, the indefatigable cable engineers had done another grapple, with success this time. Marley hurried to the bows of the ship, and looked over. There was the grapnel, sure enough, high and dry out of water, grasping a V-shaped bight of cable. The cable was tufted with lumps of white coral as big as a man's head—some of them—and it was strange to think of all the years it had lain at the bottom of the sea to get crusted like that. Don Alvarez had left the bridge and was now on the bow-balks with Mr. Toms, talking in rather an excited manner.

'Are you of a certainty sure that this is the European end of the cable we have secured, and not the Brazilian end?' Marley heard him say.

'Sure?' said Mr. Toms, in answer. 'Certainly I'm sure—sure as my name is Toms.'

'Thank you,' said Don Alvarez, and leaving the bow-balks he walked aft to the bridge.

'Now, Kipper!' cried Mr. Toms, 'get the stoppers on the cable, and make ready to cut.'

'Ay, ay, sir!' replied the Kipper.

The giant fixed himself in a little stage, something like the one in which poor Adams was sitting when the rope broke; they lowered him over the bow, and he fixed two ropes, one to the European side of the bight of cable, one to the loose piece.

'Tighten 'em up,' he shouted, and the two ropes were hauled taut, thus relieving the grapnel of all

strain. Then the Kipper, with great precaution, cut the cable just where it hung on the prong of the grapple; the loose piece was thus divided from the European end, and each hung by its respective rope. Then the rope connected with the loose piece was attached to the picking-up drum, and the loose piece was hauled on board.

It proved to be only a quarter of a mile long; of course, they might have cast the thing away and not have troubled to haul it on board; but cable is such valuable stuff that even a quarter of a mile of old cable tufted with coral is worth taking trouble over. In half an hour it was stowed, and Marley had possessed himself of several great chunks of branching coral that it had brought with it. Now the rope attached to the European end of the cable was fixed to the picking-up drum and the European end was hauled on board; it was lugged aft to the cable-deck, and there it was electrically attached to the testing-room.

'Come up, quick,' said Teddy, when they had seen all this done, 'and we will peep through the testing-room window and see them talking to Europe.'

The testing-room windows were curtained, all but one, and through this they peeped. Mr. Graham, the electrician; Diego, his assistant; Don Alvarez, and Captain Sprott were in the testing-room. They had not begun operations yet, for Diego was getting the mirror galvanometer in order. Don Alvarez was smoking cigarettes. He seemed in a state of suppressed excitement. Teddy could see him clenching and unclenching his hands, which were behind his back. He was holding something in his right hand, too, but what it was Teddy could not at first make out, for the light in the testing-room was very dim.

Suddenly the spot of light on the scale of the mirror galvanometer began to oscillate. Europe was talking to them. A message was coming through, which Mr. Graham read out. When it was finished, Don Alvarez's excitement seemed to leave him. He pushed his coat aside, and placed something in the hip-pocket of his trousers. Now Teddy saw what the thing was: it was a pistol.

'Did you see him put that pistol in his pocket, Marley?' asked O'Brien, as they turned away.

'I did.'

'Well, do you know what I think? Just this: this chap isn't Don Alvarez at all. He has managed to get on board in the place of Don Alvarez somehow, and he was afraid the fact would have leaked out by this, and they'd telegraph the news from Europe; if they had, he'd have shot the lot in the testing-room. That was a Colt automatic pistol, firing eight shots. The crew would have risen, and we should all be fighting now for our lives.'

'But see here——' said Marley.

'Wait a moment—I'm pretty certain now what this chap wants is to get hold of the Brazilian end of the cable—for what reason goodness only knows! I only know this, that there is no other explanation. No matter, we are safe for to-night, anyhow—we're safe till they've collared the Brazilian end. Come and let's look at them putting on the buoy; they

are going to heave this end overboard with a buoy to it whilst we hunt to-morrow for the Brazilian end.'

They went forward to the bows, where the cable-hands were fixing up a large red buoy. It was swung up over the side with two lighted lamps on it, and the telegraph flag fluttering in the breeze. Dusk had fallen, and the moon was rising over the sea. The dinner-bell was also ringing, but no one paid any heed to it till the cable was disposed of.

At last they finished their work in the testing-room, and Don Alvarez came out, walking in a triumphant manner, and went aft to his cabin. Then the cable was hauled up to the buoy and attached to it, the buoy was dropped into the water—splash!—and away it went from the ship's side in a circle of foam, a Holmes' light flaring in the water beside it.

'Why do they put lights on it?' asked Marley.

'For us to steer by at night; we shall spend the whole night steering up and down in view of that buoy, and to-morrow morning they will start grappling for the Brazilian end.'

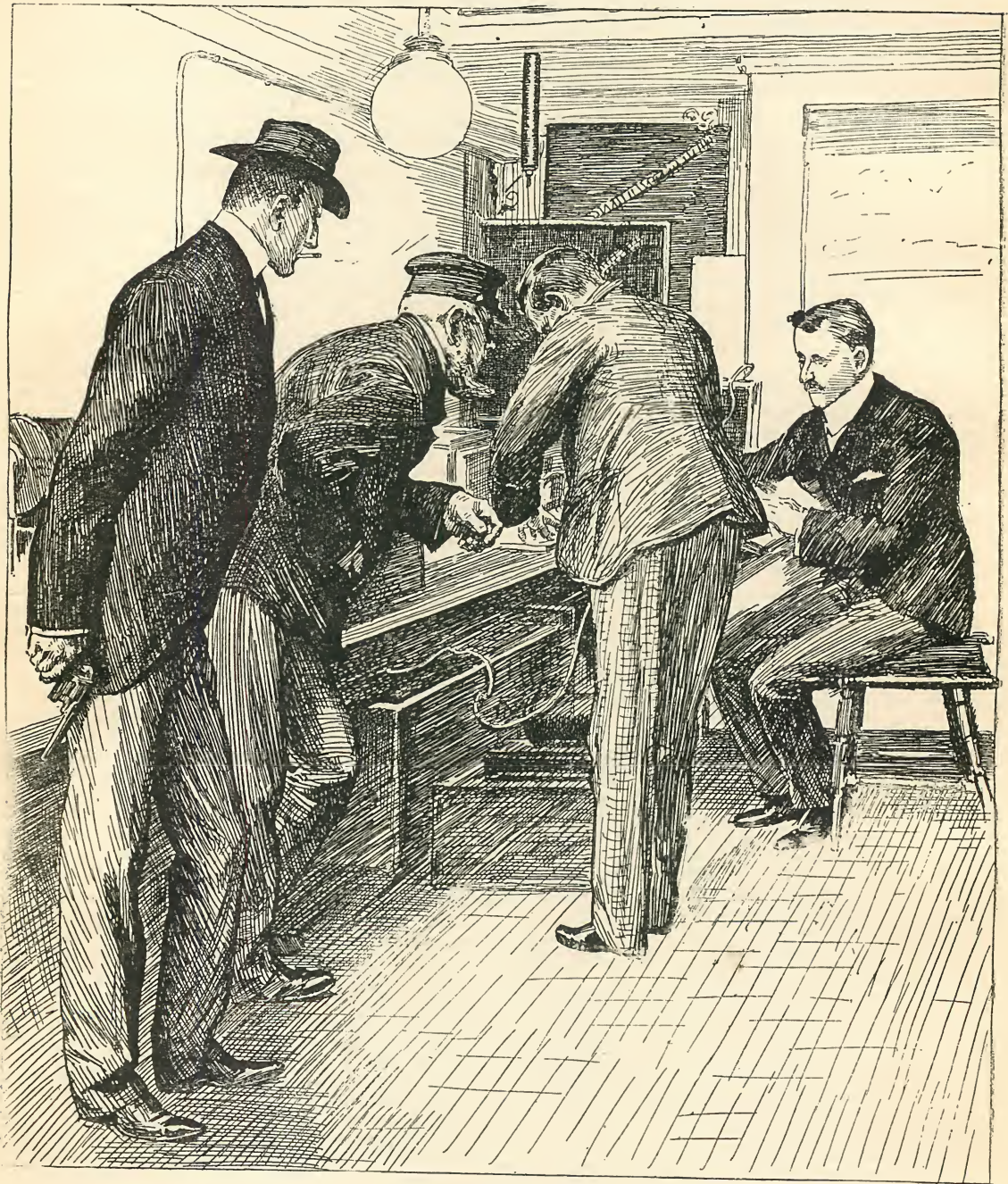
CHAPTER XIV.—THE SHARK AND THE PROPELLER.

AT five the next morning Mr. Toms was standing on the bow-balks; the dawn had scarcely come into the sky, the arc lamps were lit, and under their light the cable hands were getting ready two more buoys. The ship had been moved a mile or more to the west, and from aft you could hear a noise like the sound of an immense sewing-machine at work. It was the little engine of the Kelvin sounding machine.

Then one of the hands came running forward with a bit of paper. Mr. Toms read what was written on the paper: it was the depth of water, just here over a mile; then he proceeded to get out his buoys.

One could almost write a book on deep-sea buoys. To lay buoys in shallow water is nothing, for you can moor them with chain; it is when the water is half a mile or a mile deep that the trouble comes in, for you have to moor them with rope. Now, a buoy is a thing never at rest when in the water. It is perpetually twisting and turning, rotating on its axis; doing everything it can, in short, to twist itself free from the rope, and very often succeeding. To look at a row of these red-painted things you would never imagine that each had a character of its own; yet it has. Mark-buoy No. 5 on the *Kingfisher*, for instance, was the trouble and torment of Mr. Toms' life, when he had to use it. Moor it how you would, it had a knack of twisting free from its couplings, and going adrift on a cruise of its own. Mark-buoy No. 1 was almost perfection in this respect, yet it had the trick of dragging its anchor. Mark-buoy No. 3 never went over the side with its lamps alight, but it would souse its lamps and put them out. Mark-buoy No. 7 'floated like an anvil,' to use Mr. Toms' expression; that is to say, it rode heavy, and seas washed over it sometimes; and mark-buoy No. 11 had the bad reputation of having seriously injured two men whilst being got overboard.

(Continued on page 146.)



“He was holding something in his right hand.”



“Go to your cabin, and remain there.”

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 143.)

AS Mr. Toms was finishing his work with the buoys, about seven o'clock, Teddy came on deck.

One could hardly imagine that the unfortunate Teddy could make things worse for himself with Captain Sprott than they were already, but you never know what you can do in this respect.

Teddy looked over the side, and saw the shark which was still patiently attending the ship, and, forgetting Captain Sprott's warning on the last expedition, or perhaps rendered reckless by the captain's unfair treatment, off he went forward and begged a piece of beef from the butcher. He ran down, fetched the shark-hook from his cabin locker, bent it on to twenty fathom of signal halliard line, rigged a block tackle, and lowered the bait.

The shark snuffed at it, but did not take it; but Teddy knew that sharks, like people, alter their minds, so he concealed himself from view, lying flat on the after-gratings, and holding the halliard line connected with the block tackle in his hand.

All at once came a pull and Teddy swung on to the tackle for all he was worth. It was a long, deep, steady pull, and do what he would, despite the purchase the tackle gave him, he had to pay out fathom after fathom of line.

Then, suddenly, the pull ceased, and so did the movement of the ship.

Teddy sprang to his feet and looked over the after-rail; then, to his horror, he saw what had happened, the line was tucked away under the stern, it had fouled the propeller, got wound round it and jammed in opposition to the thrust-block, thus stopping the ship. Fortunately she had been going dead-slow.

Mr. McGrath's form emerged from the engine-room hatch. Mr. Toms was heard bellowing from the bow-balks to know what was wrong with the engines, and why they had stopped the ship just as the grapnel was down. The first officer on the bridge was telephoning to the engine-room to ask if they were asleep, or playing tiddley-winks, or what; and the captain, who had been in the chart-house, came out and down the bridge stairs.

Then every one came aft and stood on the grating round the unfortunate O'Brien. They did not ask for explanations; the tackle and the position of the line over the side told the whole tale loud, as though it had been told through a speaking-trumpet.

'O'Brien,' said Captain Sprott, speaking with an awful calm, that was far worse than an outbreak of wrath, 'go to your cabin, and remain there till I consider what is to be done in this matter. My express orders were that shark-fishing was not to be indulged in when the ship was under way. You have broken my orders, you see the result—go to your cabin.'

Teddy went, almost heart-broken, for he knew that this time his punishment was deserved, and he knew that now, for certain, he would be dismissed the company's service. This real crime on top of all the imaginary misdeeds the captain would urge against him, could not fail to bring about his dismissal. He went to the cabin where Marley was dressing, and told him the awful news.

Then he broke down, and, to use his own expression, 'blubbed.' And it took a good deal to make Teddy 'blub.' It was not of himself he was thinking, but of his old father, away in Cumberland, and the grief that he would feel.

Meanwhile, a consultation was going on aft.

'There's naught to be done,' said Mr. McGrath, 'but flood the forward cable-tank, which is empty, and sink the bows five foot; five foot will raise the propeller, so that we can get at it; it will be a four hours' job at least, and all for a bit of a lad's prank. A'weel! there's no manner of use grumbling; let's to work.'

CHAPTER XV.—A TERRIBLE CATCH.

It took four hours, as Mr. McGrath predicted, and O'Brien, a prisoner in his cabin, heard the steam-pumps at work flooding the cable-tank forward.

The chief steward himself brought his breakfast on a tray, for Teddy was a favourite with every one except the captain, but he could not eat in the intense state of misery he was in.

When, under the pressure of water in the forward cable-tank, the ship's bows had been sunk five feet, and the stern consequently raised the same distance, so that the propeller shaft was out of the water, a boat was lowered, and the Kipper and two others rowed under the stern, and after ten minutes' gouging and prizing got the thing free.

Then the powerful steam pumps were reversed, the water was pumped out of the cable-tank, and the ship resumed her true level.

It was twelve o'clock before they got to work with the grapnel, and they ought to have started at half-past seven.

Marley was perhaps as much distressed in his mind as Teddy, for he had heard the officers talking amongst themselves, and every one was agreed that this last escapade of O'Brien's, coming on top of Captain Sprott's anger against him, would clinch matters, and that when they returned to London he would 'get the sack' from the company for certain; but there was no use telling Teddy this and making him more miserable than he was.

At two o'clock that afternoon the grapnel struck something that was not rock, to judge by the dynamometer.

Mr. Toms was superintending things from the bow-balks; beside him stood the Kipper and Jervis the second cable-hand; Don Alvarez was on the bridge, and Jones, the third officer, was officer of the watch. Four bells had just struck when the most extraordinary and weird incident occurred.

The index of the dynamometer, which had risen to three tons, suddenly dashed up to seven tons.

'Hullo! hullo!' cried Mr. Toms, 'what's this?' Before he could say another word the index had dropped with a bang to zero.

Sloper, who had come forward on hearing the picking-up gear at work, and put his ear to the ropes, seemed strangely excited. He was dancing about on the bow-balks, chattering and jabbering, and once he caught Mr. Toms by the leg of his trousers and made as if to pull him away from the bow.

'What ails the monkey, anyway?' cried Mr. Toms.

'I can't say, sir,' replied the Kipper, 'but there's

something queer the matter with the cable. Hullo! hullo!

The index had dashed up to ten tons at one rush, and the grapnel-rope, humming with the sudden strain, went out from the bows till it made an acute angle with the water.

(Continued on page 158.)

PUZZLERS FOR WISE HEADS.

8.—WORD SQUARE.

1. A portion.
2. A plant.
3. To move along by turning.
4. To utter.

R. M. B.

[Answer on page 179.]

ANSWERS TO PUZZLES ON PAGE 106.

6. C
L E T
M O N T H
C E N T U R Y
S L U N G
c R Y
Y

7.—A gardener is the most extraordinary man in the world, because no man has more business on earth, and he always tries to choose good grounds for what he does. He commands his thyme and is master of the mint. He raises his celery (salary!) every year, and it is a bad year indeed that will not bring him in a 'plum.' He meets with more boughs than the sovereign, and has more laurels than any general can win.

NOT WATER ENOUGH.

A HIGHLAND drover who had spent all his life inland, and knew nothing about the sea, except that it was a great sheet of water, arrived one day with his sheep at a ferry over an arm of the sea. It happened to be low water, and the ferryman told him he must wait, as there was not enough water to float from the pier.

'Not enough water!' said the Highlander; 'if you have not enough water in the sea, where do you expect to get water from?'

He was wiser, an hour later, when he saw the tide come in and cover the muddy foreshore with deep waves.

'I'M NOT DEAD YET.'

SOME years ago a block of houses fell down in Edinburgh, and several people were killed. The workmen made immense efforts to rescue a boy, who was supposed to be under the bricks; but the men were all but despairing, when suddenly a cheery young voice sounded from beneath the *débris*: 'Heave away. I'm not dead yet!' On hearing this the men redoubled their efforts, and the brave boy was brought out almost uninjured.

When the houses were rebuilt, the principal gateway was adorned with the boy's bust, and his own brave words were carved under it.

ANIMAL MAKESHIFTS.

True Anecdotes.

V.—EARLY LESSONS.

IT is interesting to notice how easily every young creature except a human baby seems to find out all he ought to know in order to make his life happy and useful. Though highest of all in the end, our race is the most backward at the beginning. Directly a chick leaves the egg, it begins to peck, as if it had lived on corn for years. Young ducks preen their feathers and can swim directly they are hatched, and new-born crocodiles, a few inches long, will fight if interfered with. The young of the pretty little moor-hen, who builds her nest close to the brim of a river or pool, plump straight into the water from the egg-shell, and swim merrily with their tiny red feet.

Though their young know so much, however, animals know that it is their duty to educate their little ones. It is on the Kindergarten system that their infant schools are conducted; the games which are played by old and young together are better than any books. On a moonlight night, the mother-fox may sometimes be seen teaching her cubs, as a cat teaches her kittens or a dog her puppies, how to hunt for prey, where to hide, when to pounce; then, suddenly remembering, poor things! theirs will also be 'lives of the hunted,' as well as of the hunters, she pretends to chase them, drives them about, runs them down, and ends the play by a sham fight, snarling, growling, worrying, tearing, killing—all in fun. Thus practice makes perfect, and business is taught by pleasure.

Birds are easy creatures to watch at their lessons. Everybody can see a little brown sparrow, at least, in springtime, bringing up his brood, and in most towns, even in London parks, song-birds of many kinds are now protected. Not long ago I saw a mother-thrush in some such place, who had brought her eldest son from home to the nearest stretch of grassy lawn for a lesson in getting worms for himself. She went hopping along very fast, and, stopping with a jerk, turned her head aside to listen for the rustle of a worm or insect in the grass, the baby-thrush following her everywhere as a little dog follows his master, begging loudly for food. No; she would not give him a bit. She wished him to listen for worms; and soon he caught the sound, and squatted down in front of her, shivering his wings and opening a great pink mouth. In vain! She pulled out a worm, ate part of it herself, and left him to pick up the rest. He did not understand. Then she stooped and tried to show him how, and ended by finishing it.

It was a severe lesson; but when this had been repeated three or four times, it seemed to dawn on the youngster that he might as well do a little on his own account; and at last he feebly poked at the worms himself, and found out that he knew the way to his own mouth very well if he tried. I could not stay to the end of the instruction, but I feel sure that he departed a wiser thrush.

Lessons in flying are beautiful to behold. Along the sea-coast the fluffy infant gulls sit on ledges of rock to receive the fish brought by their parents, and, when old enough, the father-bird coaxes them



“The mother-fox pretends to chase them.”

to become fishers on their own account. He is kind but firm, takes short flights to and fro, bringing no fish, but trying to say, ‘There’s as good fish in the sea as ever came out of it; go and catch it yourself.’ But the baby-gull, though he casts a wistful look at the shining waters, where he feels he is henceforth to win his bread, is afraid to make the plunge. Then his father takes a flight down to the shore, and comes sailing back to say, ‘There! You see I went down, and I have come back all safe. Now *you* try.’ At last the young one, pressed by advice and by a little wholesome fasting, spreads those strong wings and flutters down after his best friend, nevermore to return, for, the delights of sea-fishing once tasted, he begins life on his own account.


Sir H. Davy saw two parent-eagles above one of the crags of Ben Nevis teaching their twin eaglets to fly. They began by rising from the top of a mountain in the eye of the sun; it was about mid-day, and bright. At first they made small circles, and the young birds imitated them; they paused on their wings, waiting till the little ones had made their first flight, and then took a second, enlarging the circles as they went into a wider and wider spiral. The young ones followed, seeming stronger on the wing as they mounted, and the family of royal birds continued this sublime kind of exercise till first the young ones and then their elders were lost to the aching sight.

Concerning food there is not much for animals to teach their young; as a rule, they turn to the proper sort without guidance. Yet the mother-rabbit brings out her little troop of bunnies, who have fed hitherto on milk, and shows them where the sweetest morsels may be nibbled and what herbs to choose. Her mate, said to be an indifferent father, seems proud to greet his children at this crisis in their lives. He takes them between his paws, smooths their fur, and caresses them with great tenderness.

A great moral is to be drawn from Mother Nature’s conduct in such matters. Though her early lessons sometimes appear harsh, love underlies them all. She detests spoilt children. No animal is ruined by her for want of a wise firmness, nor made helpless and selfish by over-softness, nor prevented by false kindness from holding its own in the battle of life.

EDITH CARRINGTON.

MOTHER’S MERRY BOY.

 MERRY boy is Charlie,
And full of fun and glee;
His laughter rings like music,
So light of heart is he.

Though sometimes he is wilful,
And tear-drops fall like rain,
He very soon is sorry—
Then shines the sun again!



“Far too kind is Charlie, To breathe an angry word.”

He's Grannie's 'little treasure,'
And Father's 'pride and joy,'
But to his loving mother
He's just her 'merry boy.'

When baby sister calls him
To join in games of play,
He lays without a murmur
His book or toy away.

And 'midst their fun and frolic,
No discord is there heard,
For far too kind is Charlie
To breathe an angry word.

Then welcome we the laughter
Of Mother's merry boy,
For earth has need of sunshine,
And hearts have need of joy.

THE BEY'S WISDOM.

A CERTAIN ruler of Tunis, Mahomet Bey, was dethroned by his subjects. He was a wise man, and he had a great reputation throughout the country and in the neighbouring States. It was generally believed that he had magical powers, and that he was acquainted with the secret of the philosopher's stone, by the aid of which he could turn any common metal into gold. The Dey of Algiers had heard rumours of this, and like most other people he envied Mahomet Bey the possession of a stone so wonderful and so precious. When, therefore, he heard of the Bey's downfall, he plotted to obtain this stone, and sent word to the dethroned ruler that he would restore him to his throne, on condition that the latter should reveal to him the secret by which base things, the common earth and stones and metals, could be turned to gold.

The offer was accepted, and in due course Mahomet Bey was reinstated on the throne of Tunis. He was not forgetful of his promise. In a little while the Dey of Algiers received from him a solemn deputation bearing the precious object, which was to give the power of creating unlimited wealth. Imagine the Dey's astonishment when he found that it was only a common plough.

Nevertheless, there was great wisdom in the hint that was thus conveyed, since it is only by a well-directed industry of hand and brain that man extracts the wealth which lies in common things.

THE FLOWER-SHOW.

I.

'MOTHER,' said Tony, 'may I have the old sheets again?'

'Another flower-show, Tony?' said his mother, smiling; 'don't you think that you had one a very little while ago?'

Mother was sitting in the dining-room with a great heap of stockings waiting to be darned lying in her lap, and Tony had come in from the garden through the window instead of the door, because he

was so excited, and it was the shortest way. He stood leaning against the table with rather an anxious face. His suit looked very much as if it had been climbing trees and cleaning out the rabbit-hutch; it was all over green moss-stains and little tufts of white hair.

'You see, Mother,' he said, 'the last flower-show was spoilt by the rain, and this one is to be a really big one, with prizes (I have thought it all out), and it won't be only us, because I mean to ask Ronnie and Effie and Paul, and perhaps Sally and Cook and Alice, too. What do you think?'

'Who is going to give the prizes?' said Mother.

Tony got rather red. 'Well, I thought that you and Father might, and perhaps Dr. Drew would give me a threepenny-bit inside a lot of little pill-boxes, as he did when he brushed my throat and I did not cry.'

Mother laughed. 'Well, you can have the sheets,' she said; 'but you must take more trouble this time. See that the tent is fastened so that it will not come down on my head, as it did last time, and the show must not be until to-morrow, so that you will have plenty of time to get things properly ready, and to tell the others.'

'Oh, Mother! but perhaps it will rain!' cried Tony.

'You can tell them that if it rains you will have it the day after.'

'Oh, very well,' said Tony; 'but to-morrow does seem such a long way off. Do you think that I might just put up the tent, Mother? It will take me rather a long time to make it so that it won't come down on your head, you see.'

'Yes, you may do that—and, Tony, what are you going to give for a prize yourself?'

Tony had never thought about that. He stood very still, looking at Mother. 'I suppose my box of fishes wouldn't do?' he said.

'Isn't the magnet-stick lost?' said Mother.

'Yes, it fell down into the rocking-horse's inside, through the hole where the tail used to be.'

'Then the fish are not much fun now?'

'Oh, no, not a bit,' said Tony; 'they won't follow you at all. You can only blow them along with your breath. I couldn't give them, could I?'

'Well, it would not be a very grand present,' said Mother.

'There is my musical-box,' said Tony very slowly; 'would that perhaps do?'

'That would be a *very* grand present,' said Mother.

'Yes, I think it would,' said Tony, with a big sigh.

'You see, it is not a nice way of giving a present to give something you don't care a bit about yourself,' said Mother.

'No, it isn't,' said Tony. 'Well, I rather hope that Hetty or Lally will get it, and not Ronnie and Paul, for then I might still be allowed to play it sometimes.'

Mother drew him to her and kissed him. 'Now you can run away and put up your tent,' she said.

'Oh, yes!' said Tony, and he rushed out of the room and upstairs to find his nurse. 'Sally! Sally!' he cried, 'where are you?'

But the nursery was empty, so Tony clattered off down the back-stairs to the kitchen, where he found Sally talking to Alice and Cook. But he was in such a hurry to get the sheets out of the linen-cupboard that he ran right into Cook, who was just taking the bread into the larder.

Bump, bump, bump! went the loaves. One rolled under the dresser, one under the table, and another went bouncing out of the kitchen door. 'There, you naughty boy!' said Cook, 'just see what you have done.'

'I'm not at all naughty,' said Tony, 'I'm only in a great hurry—do come along quick, Sally, and get me the old sheets out of the cupboard—Mother says that I may have them.'

'But you should not be such a rough little boy!' said Sally, severely.

'Well, I am *very* sorry, Cook,' said Tony. 'Now, Sally, will you come?'

So Sally went upstairs to the linen-cupboard and gave Tony out the old pair of sheets that Mother had said he might have.

'It is going to be a very big show,' said Tony, as they went down the back-stairs together. 'You must show something, Sally, and so must Cook and Alice.'

'Oh, Master Tony, I have nothing to show.'

'You can go out for a walk and get some flowers to-morrow, or you can get some out of your mother's garden—or some fruit,' said Tony. 'Your mother can show something, too, and Cook and Alice can send the geraniums out of the kitchen and pantry windows.'

Tony was so very busy that he could not stop as he went through the kitchen to tell Cook and Alice about the show, but he called out as he ran through that Sally had something very important to tell them about.

The sheets were very heavy. Tony tried to spread them out on the lawn, but they seemed to be all in a tangle. He was puffing and blowing over them with a very hot face, when his father came across the lawn to him.

'You look rather in a muddle, Tony!' he said.

'Not exactly in a muddle,' said Tony, 'only the sheets won't spread out, and I am in rather a hurry to make a tent, you see.'

'Can I help you?'

'Oh, Father! will you?'

'Yes, I will. Is it another flower-show?'

'Yes,' said Tony. 'Thank you awfully, Father. Can you tie this corner of the sheet to the cherry-bough up there, and this corner a little further on? And these two corners must be fastened to the ground, and then the other sheet on the other side just the same. Oh, won't it be a lovely tent?'

It was a lovely tent when it was finished, and, as Tony said, it would not be in the least likely to come down on Mother's head, because Father had put it up. He walked round and round it, and in at one end and out at the other, and I dare say that he would have been quite happy going in and out for much longer, only suddenly the others came home from playing in the park. The others were Hetty, and Lally, and Punch (he was called 'Punch' because he had such a large nose).

Lally was one year older than Tony, and Hetty and Punch were older still, and they thought themselves much too big to play with their little brother.

'Look, Punch! look, Hetty and Lally!' he called. 'Isn't this a lovely tent? Father helped me to put it up, and there is going to be a most splendid flower-show to-morrow. You can all show, and Father and Mother have promised to give the prizes, and they are to be sixpence for the best plate of fruit, threepence for the second, and a penny for the third; and Mother is going to give sixpence for the best bunch of wild flowers, and there will be sweets and nuts and sugar-biscuits, and other things as well. I am going to give a very grand prize for a table decoration too.'

'Another show!' said Hetty, shrugging her shoulders. 'It's shows, shows, shows all day long!'

Tony got rather red. 'It is a more special one than usual,' he said, 'and Mother says that I may have Effie and Ronnie and Paul; and I have asked Sally and Alice and Cook too.'

'Well, I can't come for one,' said Punch. 'I am going fishing all day long to-morrow with Jack Shotter.'

'Oh, Punch, do take me!' 'And me!' cried Hetty and Lally.

For a moment Tony thought that he would have no one at all to his show; but Punch made him quite happy again by saying that he could not possibly take the girls, because Hetty always would talk and frighten away the fish, and Lally always cried when the worms were put on the hook.

'Won't you be rather disappointed not to come to my show?' said Tony to his brother.

'Well, I can show, even if I am not there,' said Punch. 'I have got three gooseberries left on my bush—whoppers! but mind you, Tony, they are to be shown, *not* eaten!' he said, sternly. 'I want one myself, and the other two are for Mother.'

'Oh, of course!' said Tony, eagerly.

'I think that is why Tony wants to have a flower-show,' said Lally; 'he wants to eat up all the fruit afterwards!'

Tony got very red indeed, and looked as if he was going to cry. He remembered that twice he had eaten some fruit that he ought not to have touched, and Mother had been very vexed about it, and the others had called him a 'pig.' He had been dreadfully ashamed of himself; but, though he had not forgotten about it, he hoped that the others had until Lally said that about the fruit.

When they had gone, Tony thought that he would go across the road, and tell Effie Drew about the show. Dr. Drew's house was opposite, and he was just going out when Tony came to the door; but he found time to run back into the surgery and look out six little pill-boxes that would fit inside each other, and in the smallest one he put a bright new threepenny bit, and he said that it was to be a prize for the best collection of grasses with names put to them.

When the doctor had driven off, Tony stayed to have a game with Effie in the garden; and then he bustled off home, and got Sally to take him to tell Ronnie and Paul about the show.

(Continued on page 154.)



"Bump, bump, bump went the loaves."



“‘I want you to come to the flower-show now.’”

THE FLOWER-SHOW.

(Continued from page 151.)

II.

IT did not rain the next day: the sun shone bright and warm. Tony got up very early, because he was so excited about the flower-show. He had picked the currants off his own little bush in the garden the evening before. They were heaped upon a saucer in the larder, and covered with a cabbage-leaf to keep them cool. Near them was a very big soup-plate, with three gooseberries arranged very carefully in the middle of it. Punch put them in the larder himself before he started out on a day's fishing, while Cook was cutting him some sandwiches and a large slice of seed-cake to take with him.

Ronnie and Paul had come with their things. Ronnie had picked a big bunch of wild flowers on his way, and Paul had brought a cabbage-leaf full of black currants. The boys got rather in Tony's way, for as fast as he arranged the things, Paul would push them crooked on the benches, and Tony hated to see things crooked. At last he asked them if they would like to go and feed the rabbits, and when they had run off he got on much better.

When he had finished his work in the tent, he ran indoors to get Effie's strawberries and flowers, which Mother had been taking care of in the drawing-room. Tony thought that the strawberries smelt delicious as he carried them along. It would have been better if he had taken the flowers first and then come back for the fruit, but he was so sure that time was going faster than it really was, and that he should be behindhand with his work, that he staggered along with the vase in one hand and the dish in the other, and, as he was trying to put them both carefully down on the bench in the tent, the dish tipped up, and half the strawberries rolled off on to the ground, and all Effie's prettily-arranged leaves came out.

Tony did his best. He picked the fruit carefully up, and rearranged the leaves; but one strawberry was squashed by the fall, and was all pulpy on one side. He tried to arrange it on the plate so that it would not show, but it looked bad no matter where or how he put it. For a moment he stood wondering what to do. It would be a pity to throw it away, he thought. Next moment he had put it into his mouth and had eaten it all up.

He felt very unhappy when it had gone, though he tried to persuade himself that it could never have been any good for the show, and at that moment who should come running up but Hetty and Lally.

'Look here, Tony,' said Hetty, 'I've found some little wild strawberries, and I am going to show them instead of gooseberries, for it's no use my trying against Punch.'

Lally had a great brown jar full of Shirley poppies for a table decoration. She was just going to put them down when she saw Tony throw a little green thing like a stalk under the bench, and noticed that his face was very red.

'What are you doing, Tony?' she said, severely. 'You were not touching the fruit, were you?'

'No—oh, *no!*' said Tony, very quickly. 'Of course I wasn't.'

The two little girls looked hard at him.

'You look *very* red!' said Hetty.

'You *smell* just as if you had been eating strawberries!' said Lally.

'And there is red on your mouth!' they both said.

'I'm red 'cause I'm hot,' said Tony, turning his back, and pretending to arrange the flowers on the bench more carefully.

Just then Ronnie and Paul came running back full of excitement. Paul had let the black bunny loose. It was running all about the stables, and they could not catch it.

So, for the time, every one forgot about the strawberries, and ran hard to the stables, to try and catch the black bunny, and put him back in his hutch.

III.

At half-past two that afternoon Mother and Father went into the tent by themselves to do the judging. The children played about on the lawn while they were looking at the things inside.

Luckily it did not take Father and Mother very long to decide who were to have the prizes, and very soon they came smiling out of the tent, and told the children that they might all go inside, and see what they had each got.

Tony was just going in with the rest when he remembered suddenly that he had never told Sally's mother what time the show was to be. 'Well,' he said to himself, 'she ought to have asked Sally. I can't be supposed to tell everybody about it!'

Then he felt ashamed of being so selfish, and turned back to go and tell her at once; for it was better to be late than never.

Just as he was running down the drive, he met Effie and her mother coming in. 'The show is opened—the show is opened!' he shouted, as he tore past them. 'I'm going to tell Mrs. Moss to come.'

Mrs. Moss lived in the cottage next to the Vicarage, where Tony lived. She was a washerwoman, and her cottage was nearly always full of steam and the smell of soap and hot water.

He was very much out of breath with running. 'I have come to tell you that there is a very grand flower-show in the garden to-day, Mrs. Moss,' he said. 'I meant to tell you before, but I went and forgot. I want you to come now. There are lots and lots of prizes, and perhaps Sally has got one. I came away before I saw.'

Mrs. Moss smiled, and rubbed the soap-suds from off her arms. 'Bless you, Master Tony!' she said. 'How can I come, my dear? I'm just in the middle of the wash, and my kettles are all on the boil. I couldn't leave them.'

'Oh!' said Tony, in a disappointed voice.

Mrs. Moss was a very kind woman. 'Will the show be on in the evening?' she said. 'I think I might manage to get off then for a little while.'

Tony cheered up. 'Oh, yes,' he said, 'that would do splendidly. But I think I must go now, for, you see, it is *my* show, and I ought to be there. Good-bye, Mrs. Moss.'

'Good-bye, Master Tony, and I'll be sure to come.'

(Concluded on page 170.)

IN SCHOOL AND OUT.

I.—THE WEEKLY COMPOSITION.

'LOOK here, Stanley, you must stop this larking in class,' said Anderson Major, head prefect of Canbury Grammar School, to his small younger brother, who had only been sent home to school from India at the beginning of the term.

The father of the two boys had been quartered in a cool station for some years, and consequently Stanley had been able to remain with his parents longer than is usual. Mr. Anderson had given him a very good grounding in learning, but his elder brother was now reaping the benefit of his having been allowed to have too much of his own way, both by his parents and by the native servants. He gloried in the number of rules he managed to break or evade, and kept his brother in a constant state of worry and annoyance. So far Anderson Major had managed to save him from many of the punishments he had deserved; but only that morning Mr. Davidson, the head master, had said to him, with a meaning smile, 'When are you going to let your duckling take to the water, Anderson?'

'He's so dreadfully nervous and excitable, sir,' answered the prefect, apologetically. 'A caning would half kill him, though he wouldn't show it.'

'You'd better trust to me to let him off lightly the first time,' was the head master's reply. 'It isn't good for a duckling to sit under the hen's wing too long!' and he passed on with a friendly nod.

It was as the result of this advice that Anderson was attempting for the twentieth time to make some sort of an impression on his brother; but he finished his lecture as he had never finished one before: 'So you see, Stanley, it would be quite useless to come to me in the future. I am not going to help you out of any more scrapes, so I advise you not to get into them.'

'All right, Sahib!' answered the irrepressible boy with a low salaam, as, hearing the school-bell, he ran off to the Third Form class-room.

'The composition to be written to-day is to be entitled "An Adventure in a Motor-car," and the adventure may be either real or imaginary,' gave out Mr. Brownger, the master of the Third Form, and the boys in front of him settled down with one accord to their afternoon's work. Even Anderson Minor, who had plenty of brains, gave himself up with enthusiasm to the task of describing a motor-ride through an Indian jungle which he and his father had once taken with the colonel of the regiment, on which occasion they had sent an astonished and startled tiger fleeing for its life. He wrote so quickly that his essay was finished a quarter of an hour too soon, and the spirit of mischief took possession of him again. Mr. Brownger was peering at his class short-sightedly over his spectacles, and in a minute Stanley had dashed off a caricature of him in a motor-coat with huge goggles, and had begun to write a poem beneath it. He had written as far as

'Brownger bought a motor-car
And had it painted yellow;
In goggles and a black fur coat
He was a handsome fellow'—

when the class-room door opened, and a message came from the matron that 'Dr. Meredith wishes to see Anderson.'

Stanley crammed his papers together, and jumped up hurriedly, hoping to be back in time to finish his verses before the next lesson. He was a delicate boy, and the doctor usually looked him over about once a week, when he was at the school visiting other patients.

When Stanley reached the matron's room he found Mr. Davidson there in close consultation with Dr. Meredith, and was told to wait for half a minute. But the half-minute turned into a whole one, and the whole into half an hour, while he fretted and fumed on the doormat, knowing well that the time was drawing nearer and nearer to the minute when Mr. Brownger would collect the papers—and the caricature and the poem with the rest! It was only when the school-bell proclaimed that the first afternoon lesson was over, and that therefore all hope of preventing his drawing from being discovered was gone, that the head master came out, and Stanley was able to have his interview with the doctor.

It was with a pale and anxious face that he returned to the class-room, wondering whether Mr. Brownger had noticed the picture among the pages of his essay. If he had, he would be sent up to the head master for a caning that same afternoon, and the very idea of a caning made him feel quite sick. Some of his friends seemed to go up as a regular thing, but he could not believe them when they said it was much better than losing a half-holiday. Up till to-day fortune had always been on his side, and he had begun to believe that, however much he might 'lark' in class, he would never be found out.

But nothing happened that afternoon or the next day either, and Anderson Minor came to the conclusion that Mr. Brownger must be waiting to have him punished when the next composition-day came round. 'If Jack would only give me an opportunity of speaking to him,' he thought to himself, as the days dragged along miserably, 'I would ask him to help me out of this one more scrape, and would promise faithfully to do my best to keep out of any more.' But he never had a chance of speaking to his brother alone, though he did not guess that that brother was carefully avoiding him.

At last the fatal day came, and Mr. Brownger entered the class-room with the usual sheaf of papers in his hand. 'A very fair set of essays, taking them altogether,' he began, genially. 'Some are bad, some are good, and about Anderson's paper I shall have a special word or two to say at the end.'

The unlucky boy shrank together and wished the ground would open and swallow him. He did not hear a word that the master said as he criticised the other papers, and it was only the sound of his own name that recalled his scattered senses. Then he braced himself together, so that no one should see how frightened he was, and waited anxiously for Mr. Brownger to utter the expected sentence, 'Anderson, I told you I would have no more fooling in class, and this time I must send you up to Mr.



“‘I am not going to help you out of any more scrapes.’”

Davidson.’ But instead of any such word, Mr. Brownger began with a smile:

‘Really, Anderson, I was most interested in your

paper. It was well written, and the adventure you described was so exciting that I showed your essay to the editor of the school magazine, and he is

going to print parts of it, and that is a great honour for a boy in the Third Form.'

Anderson gazed at the master in bewilderment, hardly able to believe his ears. It was impossible that Mr. Brownger could have let the picture pass unnoticed if it had been with the essay; and if it was not with the essay, where was it? He racked his brain hopelessly for an answer to the question, and the essay that he wrote that afternoon was in consequence so far below the standard of the last that Mr. Brownger was grievously disappointed.

By the end of the school-day, however, Stanley's spirits began to recover, and it was with his usual cheerful countenance that he greeted his brother in the playground.

'Hallo, youngster, I want to speak to you,' said Jack Anderson. 'I have something here that belongs to you.'

'Have you?' asked Stanley.

'Yes! This!' and to the boy's astonishment his brother handed him the missing caricature.

'How did you get it?' he asked.

'The wind blew away Mr. Brownger's papers last week as he was crossing the playground. I happened to be there and picked them up for him, and thinking that a certain person would get into trouble if this particular one were discovered, I put it into my pocket. See?'

'You *are* a brick, Jack!' said Stanley, with heartfelt earnestness. 'I didn't dare ask you to help me, but I can tell you I have had just about enough of fooling in class.'

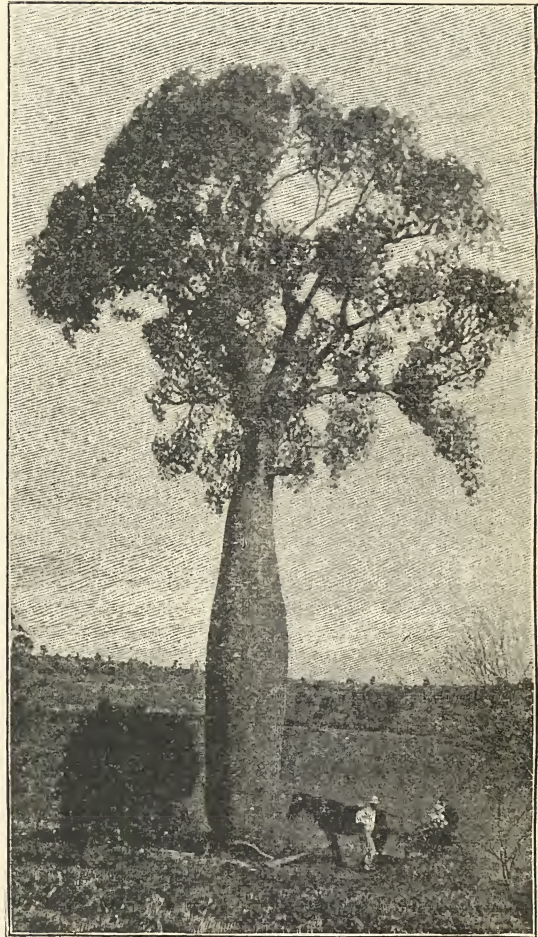
'That's right, youngster—and you stick to it!' said his brother, and passed along with a friendly nod. And though it cannot be said that Stanley became at once an entirely reformed character, at any rate he began to treat his brother's lectures with more respect.

THE AUSTRALIAN BOTTLE-TREE.

'IT was like a real bottle, thirty feet high, covered with the bark of a box-tree, and with a gum-tree growing out where the cork ought to be.' Such was the way in which an Englishman described the first bottle-tree which came under his notice; and truly, on one who does not know the tree, its sudden appearance in his pathway, often in the midst of dense scrub, must make a vivid impression.

The lower part of the trunk is thick and cylindrical, decreasing in size towards the top, its shape being that of a gigantic living bottle, from the neck of which spring the only branches and leaves that the tree possesses. In this respect it carries to an excess the peculiarity of most Australian trees, namely, their lack of branches for a considerable distance up the stem. The bark is of a greyish colour and is very hard, but the wood inside is soft and moist. The latter can be chewed in the same way as sugar-cane, but, as it lacks its sweet, pleasant taste, it is rarely used in this way. This peculiar characteristic of the tree, however, makes it a valuable food for cattle. Indeed, during the long droughts which occasionally visit Australia, hundreds of settlers have to thank the bottle-tree for saving them from ruin. Sometimes for more than a

year, and in the inland districts for still longer periods, scarcely a drop of rain falls. Every blade of grass is dried, tanks become empty, creeks no longer run, and in many cases dry up altogether, as do nearly all water-holes and lagoons; cultivation is impossible, and fodder for cattle and horses is extremely difficult to procure. Then the bottle-tree comes to the rescue. Every scrub is searched for these living bottles, and everywhere is heard the



The Australian Bottle-tree.

ringing of axes as the strange, attractive trees are laid low. As soon as the trunk has been stripped of its bark, the cattle are brought to it, if within easy distance, and there they remain till neither leaves nor wood are left. In places where settlers have no scrubs of their own, they will drive many miles in order to obtain a waggon-load of this great treasure. Sometimes, instead of allowing the animals free access to the trees, the settlers cut the trunk into strips, put the strips through the cutter, and thus make a substitute for proper chaff.

In many instances during a drought, except for prickly pears and the foliage of trees, cattle are fed on these living bottles alone, and they have been the means of saving large quantities of stock. It seems strange that in the absence of rain these trees should retain their moist interior, as the majority of others look dry and drought-stricken. But throughout all the bottle-tree flourishes, lifting its dark green leaves towards the sky, whither the farmers and squatters turn longing eyes in hopes of the wished-for rain.

When the dry season ends, and the land in a very few weeks is covered with fresh green grass, the work of the bottle-tree is done; but, mindful of its past usefulness, no farmer, unless under absolute necessity, fells this tree, and it may often be seen standing in solitary grandeur, its strange shape outlined against the blue sky, while the land at its base has been put under cultivation, or has been converted into grazing paddocks for the cattle.

Our picture is from a photograph by Mr. Walter Collings.

A JOYFUL SURPRISE.

A True Story.

ELLEN WARD is a very lonely, deaf old woman, now living in one room in a poor part of London. Once upon a time, many years ago, she was a happy, well-to-do young wife living in New Orleans. Her husband was ruined by the Civil War: then he and she came to England, where Mr. Ward died. The poor woman has had seven children, all of whom have long since passed from this world.

Mrs. Ward tells some interesting stories of her life in America. One of them is the story of a great surprise which came to her upon the conclusion of the war. At its beginning, her husband went away to join the ranks of the Southerners, leaving behind him a little son, only three weeks old. During the war, Lieutenant Ward, with many others, was taken prisoner. These prisoners of war, says Mrs. Ward, were not treated very well. There was a scarcity of clothing, and some kind man, hearing of this, took a large quantity of garments to the place wherein the 'rebels' were confined. These garments were distributed at random amongst the prisoners, Mr. Ward, who was a big man, getting a coat too small for him, while a little man, with whom he had struck up a friendship, got a far too ample garment. So the two men, on the eve of their release, sensibly exchanged coats, but Mr. Ward forgot to remove his papers from the pocket of the small coat.

By-and-by the little man was killed in battle, and so disfigured that he was unrecognisable; but the papers were found in his pocket giving the name and address of John Ward. Mrs. Ward (herself practically a prisoner in New Orleans) was written to, and informed of her husband's death. At once she ordered a grand white marble monument to be erected over his grave.

Then one day Mr. Ward passed the spot—it was somewhere near Chicago—and had the pleasure of reading his own epitaph! As soon as possible, when the war was over, he went home. He had been absent for nearly six years. Mrs. Ward had been

allowed to remain in the old house, thanks to the influence of a Northern officer who was her cousin.

In the garden the man met a little boy, apparently about six years of age. 'Are you my daddy?' said the child.

'I really don't know,' replied the man.

'Well, are you the rebel?'

'Yes; I am the rebel.'

'Then you *must* be my daddy!' The child lifted his little face for a kiss.

A negro handmaiden who had overheard this colloquy in the garden, rushed into the house. 'Mis' Ellen! Mis' Ellen!' she cried, 'here's Boss Jack!'

Mrs. Ward came out to greet the husband whom she had not thought to see again. E. DYKE.

ONE BY ONE.

ONE by one, when winter's over,
All the lovely flowers appear;
In the meadow and the garden
We behold their blossoms dear.

One by one within the heavens
Little stars unveil their light,
Till at last beyond our counting
All the skies are full and bright.

One by one our tasks are finished,
Lessons learnt, and errands run;
They will make a glorious harvest
If they're well and truly done.

One by one the years are passing,
Childhood's years so fair and sweet;
May we make them sweet with goodness
Ere they go with flying feet.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 147.)

'WHO has put the engines astern?' cried Mr. Toms. 'Bridge ahoy!'

'She ain't going astern, sir,' said the Kipper, 'but the cable's gone forward.'

'Hallo there!' came Jones's voice from the bridge. 'What ails you there? The ship's got way on her.'

Mr. Toms looked over the side—there was a strong ripple at the bow. 'We're going ahead,' cried he, turning to the Kipper. 'What's the meaning of this?'

Suddenly the dynamometer made a rush up to fifteen tons, the wire-wove grapnel-rope twanged like an enormous wasp, and they could hear the sudden swish of water at the bows as the ship was hawked through the sea.

Then Mr. Toms turned to the Kipper. 'We've hooked something alive.'

'We have that,' replied the granite-visaged Kipper; 'we've hooked sommat bigger than Jonah's whale. What fish in the world gives a strain of fifteen tons? Shall we stopper the rope and cut, sir?'

'No,' replied Mr. Toms, 'I'll play the beast, whatever it is. Pay out! pay out!' he shouted to Skinner,

the 'donkey-man,' who was in charge of the picking-up engine; 'pay out for all you're worth.'

The great drum spun round, paying out the rope just as thread rushes off a reel; the effect was at once observed, for the dynamometer sank to seven tons, and the speed of the ship slackened.

Every one was now crowding forward, for the news had spread that something strange was going on.

'What's all this?' cried Captain Sprott, climbing on to the balks. 'What have you hooked, anyway?'

'Something bigger than was ever seen by mortal man,' said Toms, who was red with excitement. 'But get off the balks, sir, for if the rope gives, there'll be damage done.'

When a wire-woven grapnel-rope breaks, it 'mush-rooms'—that is to say, it spreads out like an umbrella, and woe to the unfortunate man it strikes. The grapnel-rope just now in use had a nominal breaking strain of twenty tons, but Mr. Toms knew that it would bear a strain of thirty tons—that is to say, if the strain were not too suddenly applied. It was in the sudden rushes of the monster they had hooked that the danger lay.

Captain Sprott climbed off the balks, for, when the grapnel is down, the cable engineer is master of the ship.

'All hands get abaft the picking-up gear!' shouted Mr. Toms. Then to the Kipper, 'What say you? Shall we cut away or play him, whatever he is?'

'Play him, sir,' replied the fisherman.

'You ain't afraid?'

'That's neither here nor there,' replied the Kipper. 'But one don't get a chance like this every day. Play him, sir; but keep your eye on the dynamometer!'

'Right!' said Mr. Toms. 'But have the stoppers and axes ready, in case we want 'em. Skinner!' to the donkey-man, 'give all your attention to the engine!'

The ship was still forging ahead, when slowly the grapnel-rope swung to starboard; the dynamometer rose to sixteen tons, and the ship heading slightly turned from her course and made in the direction of Heiro. Still Mr. Toms stood motionless, with his eyes on the dynamometer, which now was slowly creeping up to seventeen tons. 'Pay out!' he shouted, suddenly, and away the rope spun, relieving the strain for the moment.

'We have two mile of rope out now,' said the cable engineer. 'We have another short mile of rope to use. Sing out and tell the cable-hands to bend on another three mile of rope. We may want it.'

'Ay, ay, sir!' said the Kipper, and he gave the order.

Never, surely, in the world before was there such fishing as this! A ship for float, two miles of wire-woven rope for line, and for hook a grapnel weighing over two hundredweight!

They had made a mile and a half towards Heiro, when suddenly the rope gradually swirled through the water to port. The thing at the bottom, whatever it was, had a radius of two miles; and Mr. Toms, judging by the short time that the rope took to swing to port, was amazed at the rapidity with which the creature must be travelling.

'Pay out, sir! Pay out!' cried the Kipper, as the dynamometer began to rush up again.

The rope spun away till Mr. Toms raised his hand and stopped it. 'Let him weary himself,' said Toms. 'I'll soon give him a taste of the strength of our picking-up gear!'

The sea was utterly windless and smooth, and, looking at the calm beauty of it, it was strange to think of the tragic and titanic struggle going on beneath its surface. Suddenly the dynamometer index fell with a flop to zero.

'Pick up, pick up, as hard as you can!' cried Mr. Toms. 'Put the ship's engines hard astern; the beast's either off the grapnel, or it's coming full speed for us!'

But this was not so, for the rope drew slowly taut right abaft, and the ship turned to the pressure, heading now for Gommera. The creature had altered its circular course for a straight line.

'Now,' said Mr. Toms, 'our turn's coming! He's weakening, Skinner!'

'Ay, ay, sir!'

'Reverse the engines and pick up.'

The drum began to revolve and wind in the rope, which was thrilling and throbbing to the frantic struggles of the thing two miles away; but, as Mr. Toms said, it was weakening, for, despite all its efforts, it could not drive the dynamometer index beyond ten tons. Mr. Toms had, in fact, played it just as a fisherman plays a salmon, wearying it out till the moment comes for the reel to come into play and the gaff.

Slowly and remorselessly the drum revolved, dragging the creature nearer and nearer. As its struggles grew less, the drum revolved more quickly, and from the angle the rope now made with the water, it was evident it was approaching the surface. Then it suddenly appeared in all its terror.

The surface of the sea boiled and foamed, and out of it suddenly shot eight great arms. A dull grey head, two vast, solemn eyes, and an enormous beak like a parrot's bill next shocked the eyes of the gazers. They could see that the grapnel was tangled in the beak, and what was more, fathoms of the grapnel-rope were wound about the roots of the arms. The creature was hopelessly tangled up in the gear. It was a decapod, or 'devil-fish,' of enormous size, a prowler of the deep, a thing seldom given to the eyes of man to behold.

Skinner at the engine shut off steam without waiting for orders, the grapnel-rope hung loose, and Mr. Toms, seizing an axe, cut it with his own hand. Scarce had he done so when the creature fell into its death-flurry. It was used to living under the pressure of a mile and more of water, and the sudden change to the surface, with its long struggle, had destroyed it. The arms beat the sea with a sound like thunder, the water boiled, then by degrees the struggle ceased and the thing vanished slowly from sight, leaving a swirl on the water as though a ship had sunk.

Mr. Toms wiped his brow with his coat-sleeve. 'Well,' he said, 'they are always accusing me of telling tall stories, but I've never told a story to equal that.'

'No, sir,' said the Kipper, 'and you never will.'

(Continued on page 162.)



"Mr. Toms, seizing an axe, cut the rope."



“Three of the foreign sailors seized Mr. Toms.”

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 159.)

CHAPTER XVI.—THE FIGHT WITH THE CREW.

THE whole adventure with the decapod had not lasted an hour, and the ship had not gone more than a mile from the mark-buoys. She steamed back to them now, a new grapnel was bent on, and the business of the day went forward as if nothing had happened.

Teddy's feelings when he heard of the sight he had missed may be imagined. 'I don't believe it,' he said, after Marley had given him a graphic account of the affair. 'A cuttle-fish tow this ship! I don't believe it, and, what's more, you won't get any one else to.'

'If I hadn't seen it myself,' said Jones, who had come down from the bridge, 'I wouldn't believe it, either; but there are things you *have* to believe, Teddy, my boy, when they are backed by the testimony of the whole ship's company.'

'Why didn't Toms go up close to it, instead of cutting away?' asked Teddy.

'Because,' said Jones, 'if that thing had caught us in its death-flurry it would most likely have cap-sized us. Bullen, in one of his books, tells of seeing one of these brutes brought up by a cachalot, a small one comparatively, and *it* was big enough. But this was an old great-grandfather squid, who had been growing no one can guess how long. He was walking about down below there like a spider, and our grapnel fouled him somehow and got tangled in his beak—notice the grapnel stuck in his beak, Marley?'

'Yes,' said Marley, shuddering; 'but what I can't get out of my head is the horrible, cold look in its eyes!'

'Well, you wouldn't have expected it to nod and smile at the ship, would you?' asked Jones. 'You would have a cold look in your eyes if you had been hauled up from black darkness a mile away below into a blaze of sunlight with a grapnel stuck in your beak. Yes, it's a pity you missed it, Teddy; it's a sight no one perhaps will ever see again, for there's no power on earth could bring a thing like that to the surface but a grapnel and a picking-up gear like ours, and a grapnel might go over ten thousand of these brutes and not get tangled in it the way ours did.'

At five o'clock on that memorable day the Brazilian end of the cable was seized.

They were about three miles from Gommera when the dynamometer began to rise. Mr. Toms raised his hand, and the main engines of the ship were stopped.

'Well, Kipper?' said he to the fisherman, who had his ear to the rope.

'It's the cable, sure enough, sir,' replied the Kipper.

Marley, who was standing by, ran down to give Teddy the news, but the latter, who was in his bunk, was so fast asleep that he thought it a pity to wake him; so he went on deck again to watch the operations.

Don Alvarez was pacing the deck in a restless manner, and when the cable was cut from the grapnel, and the loose piece was being brought on board, Marley noticed an odd circumstance: all the foreign sailors of the crew came tumbling up from the fo'c'sle to watch the operations.

As a rule, they took no interest at all in the cable work, but just now they seemed not only interested, but excited, especially as the Brazilian end was brought on board and dragged aft to be connected with the testing-room.

Suddenly Don Alvarez stopped pacing the bridge, seized the rail, and called out to Mr. Toms, 'Is the cable in connection with the testing-room yet?'

'They are making the connection, sir.'

'Tell them to stop.'

'Ay, ay, sir,' said Toms, wondering greatly at this order.

'Now,' shouted the Don, 'order the cable-hands away in their boat to fasten a hawser on to the cable when it leaves the water.'

'But, sir!' cried Mr. Toms, aghast at this extraordinary order, and irritated at being interfered with, 'the cable's all right; there's no need for a hawser to it.'

'Do what I direct,' replied Alvarez; 'I am determined to secure it properly.'

'Well, well,' muttered Mr. Toms to himself. Then he shouted in a voice like a hurricane, 'Cable-hands away in boat, rig out a hawser, and seize it to the cable when it leaves the water!'

The cable-hands, muttering and grumbling, tumbled into their boat, the falls were connected with the steam-winch, and the great boat was lowered.

'Mr. Jones,' said Alvarez to the third officer, who stood beside him, 'go down and tell me when the boat is clear of the ship.'

Mr. Jones went down the steps leading from the bridge, leaving Alvarez alone with the Russian Finn, who had been steering.

'Boat's away, sir!' cried Mr. Jones.

No sooner had the words rung out than everything changed suddenly with the rapidity of a transformation scene.

A shrill whistle sounded from the bridge. Three of the foreign sailors dashed on to the bow-balks, seized Mr. Toms, and literally hurled him overboard into the water. Captain Sprott, who was standing near the picking-up gear, was laid senseless by the blow of a marlinspike, and Mr. Jones, Jobson, the foremast man, the chief electrician, and Skinner, the donkey-man, were penned in a corner fighting for their lives, armed only with their fists.

They struck out hard and strong, but fists are of little use against foreigners armed with knives and marlinspikes. Through the din of the fight could be heard the shouts of the cable-hands in their boat, utterly helpless to assist, and in two minutes all would have been over but for a diversion that occurred.

Mr. Lockhead, of all people in the world; Teddy, who had been roused by Dick Marley; Dick himself, the chief steward, the cook, and the two under-stewards burst on the scene and attacked the Dagos from the rear, hitting right and left with spanners and crowbars.

'Take that, you thief!' shouted Teddy, knocking down a man who had just stabbed Skinner in the arm, and rolling the next moment himself head over heels in the scuppers, followed by old Mr. Lockhead, who, aiming a blow at another man, slipped, tumbled, caught at the chief steward, and dragged him down, just as a thunder of feet came from aft, and the stokers from the engine-room, armed with clinker-bars, joined in the *mêlée* on the side of the enemy.

This reinforcement carried the situation, and in two minutes more the ship was in possession of Don Alvarez's crowd. The deck was strewn with motionless figures. Skinner, Jobson, and Jones alone were left standing, bruised and beaten. Of the men lying on deck, not one, fortunately, was killed.

'Now!' shouted Alvarez from the bridge, 'bundle the lot into the long-boat and lower them away.'

During the fight on deck the cable-hands had made a vain attempt to come aboard, but Don Alvarez had seen to that. At the extremity of the bridge overlooking the water stood the Russian Finn armed with a Mauser pistol. The Kipper, who had put his hand on the hawser preparatory to climbing up it, fell back with a bullet in his shoulder.

'Eight shots,' said the Russian Finn, holding up the pistol, 'and eight more,' holding up a clip of cartridges. 'Any one else wish come on board?'

'Cast off!' cried Mr. Toms, whom they had picked up from the sea, and who had taken command of the boat. 'They've got the better of us, and there's no use wasting lives. Let's give a look round for any more of our men they have thrown over.'

(Continued on page 174.)

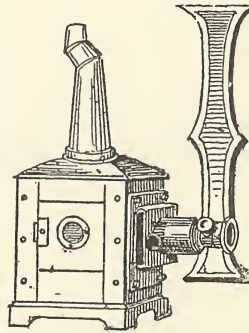
THE LAZY APPRENTICE.

IN the golden days of Florentine art, when, in spite of the continual strife within her walls, the city was growing daily more beautiful through the work of her sons, there lived an old painter, Andrea Tafi by name, who had as apprentice a lad called Buffalmacco. Tafi, being an industrious worker, was wont to rise before the dawn, and expected his apprentice to do the same. But winter mornings are dark and cold in Florence, and Buffalmacco, much preferring his warm bed to the chilly workshop, set his wits to work to frighten his master into waiting for the sunrise. With this end in view, the naughty boy caught a number of large beetles, and fastened a tiny candle upon the back of each; and then, rising for once without being called, he lit the candles, and let the beetles into his master's room. Tafi, who was just about to get up, was so terrified at the sight of the waving lights on the floor of his room, that he pulled the bed-clothes over his head and lay trembling until daylight. So scared was he at the uncanny visitors that he was almost inclined to give up his house and take a fresh lodging, but Buffalmacco, to whom he told the story, gravely suggested that he could avoid the strange sight by not rising before the sun was high. Tafi agreed to try the experiment, and, sure enough, the lights appeared no more, until the old painter, getting over his fright, began his old habit of rising in the dark

once again. Then back came the beetles at once, and Tafi submitted, setting the fashion of late rising among all his artist friends, and lazy Buffalmacco, lying comfortably in bed until the sun was up, doubtless laughed under the bed-clothes at the success of his cruel trick.

INSTEAD OF THE SUN.

V.—THE LIMELIGHT.



IF we heat a poker in the fire, it soon becomes 'red-hot,' we say. Our meaning, when we use this word, is that the poker not only gives out heat, but also gives out red light. If we go on heating the metal, the light which it gives will become brighter and whiter, until at last it is almost dazzling. This light is in some ways different from the light which we get from a burning candle

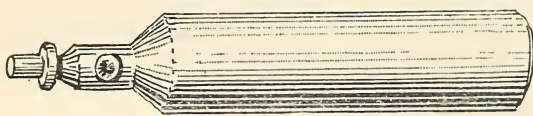
or lighted gas, and it is described as an incandescent light, which simply means a *glowing* light.

Many substances besides iron become incandescent when they are heated, and several of these are used as a means of obtaining light for our houses and streets. Electric lights of all kinds are incandescent. But the simplest kind of incandescent light is the limelight, so commonly made use of in 'magic' lanterns. This dazzling light is nothing more or less than the glow of a piece of lime which is made intensely hot.

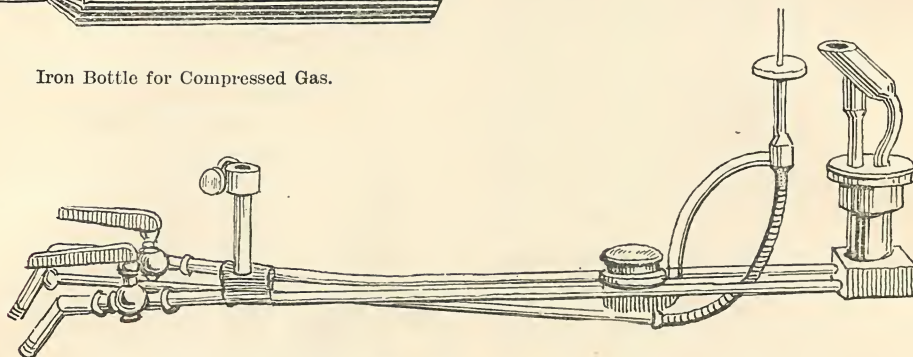
In order to obtain the intense heat which is required to make the lime sufficiently hot, a special kind of lamp or burner has to be employed. It is rather strange that the hottest flames are often those which give out very little light. Chemists frequently make use of little spirit lamps, the flame of which can hardly be seen, though it is a very hot one. When the limelight was first invented, about eighty years ago, a spirit flame somewhat like that of the chemist's lamps was used, but its heat was very much intensified by feeding the flame with oxygen gas, which hastened the combustion.

Another gas with which chemists are familiar is hydrogen, which burns with a very pale but very hot flame. By supplying oxygen to the hydrogen flame a very intense heat may be obtained, and this is the method which is now usually employed for making the lime incandescent.

The burner of the limelight is made up of two little tubes placed side by side, one for the hydrogen and the other for the oxygen. The ends of the tubes meet, so that the gases issuing from them meet as they come from the pipes; they unite and flow on to the lime. When the hydrogen is lighted, its flame burns in a stream of oxygen, and produces a very great heat. The piece of lime which is to give the light is placed on a little upright rod, which can be moved towards the jet of the burner or away



Iron Bottle for Compressed Gas.



Limelight Machine for Magic Lantern.

from it, as required. When the light is in use, the little cylindrical piece of lime stands up like a finger in the middle of the flame, and it very quickly becomes first red hot, then white hot and dazzling. It is kept in position by a long rod which acts as a spring.

Formerly the two gases, hydrogen and oxygen, were made with suitable chemicals some time before they were required, and they were then stored in huge bags shaped like bellows, one of which was connected to each pipe of the burner. In order to force the gas out of the bags, heavy boards and weights were placed upon them. Great care was necessary to prevent accidents, for if the weights were suddenly taken off the hydrogen bag, the flame might be driven back along the pipes and into the bag, and an explosion would occur. It is said that a man who was once working one of these lights in a theatre found that the hydrogen gas was not coming from the bellows fast enough. He looked round for a suitable weight to put upon the board, in order to squeeze the bag more quickly, but he could not find one. In his haste he seized a little boy who was standing near, and lifted him on to the board. A moment later, however, when the man's back was turned, the boy jumped off, and the result was a rather serious explosion.

A better way of supplying oxygen and hydrogen for the limelight is now generally adopted. Strong iron bottles two feet or more long are filled with the gases, which are forced into them under great pressure—sometimes as much as several hundred pounds on every square inch. The bottles are provided with taps, which are closed after the bottles are filled, and they can then be carried from place to place with security. All that is necessary to bring them into use is to attach the neck of a hydrogen bottle to one pipe of the limelight burner, and that of an oxygen bottle to the other. The taps are then turned on, and the compressed gases rush out, just as they would from weighted bags. The gases continue to flow until the pressure in the bottles is no greater than that of the air outside. There is then so little

gas left in the bottles that no serious explosion could occur. The empty bottles are returned to the makers, and filled again.

The limelight is sometimes called the oxy-hydro-

gen light, the name being made out of the words oxygen and hydrogen. It is also sometimes named the Drummond light, because it was first invented by Captain Thomas Drummond, who, when he was surveying in Ireland for the Government, required a light which could be seen at a great distance, and planned this way of obtaining it.

THE FRIENDLY MICROBE.

WE are constantly hearing of the diseases and troubles brought about by microbes, but, as with everything else, there are two sides to the microbe question, and it must not be forgotten that there are good as well as bad amongst the ever-present microbes.

Where, without the microbe, should we get either our butter or our cheese?—for we owe both to his fermenting activities.

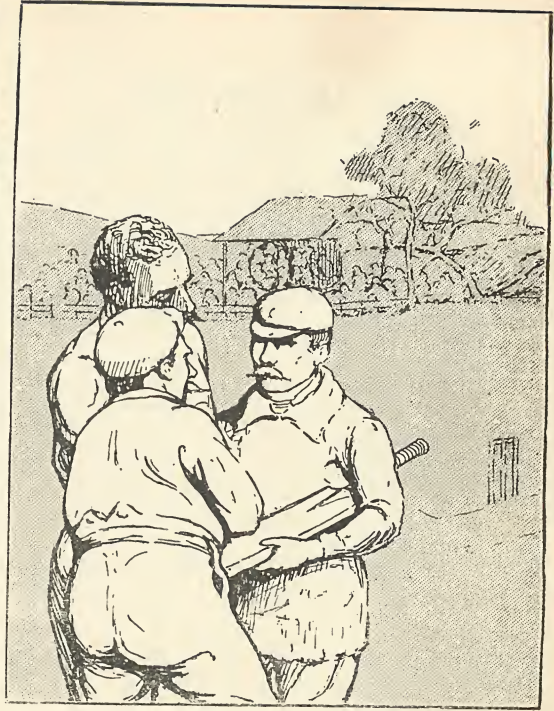
'It is the microbe,' says a medical man, 'who makes our vinegar, and is thus the parent of our pickles; without him our loaves would be so many cannon-balls; he gives us saltpetre, and through it gunpowder; and besides all this, he daily saves countless lives by preying on other, less innocent microbes.'

POSTMEN IN CEYLON.

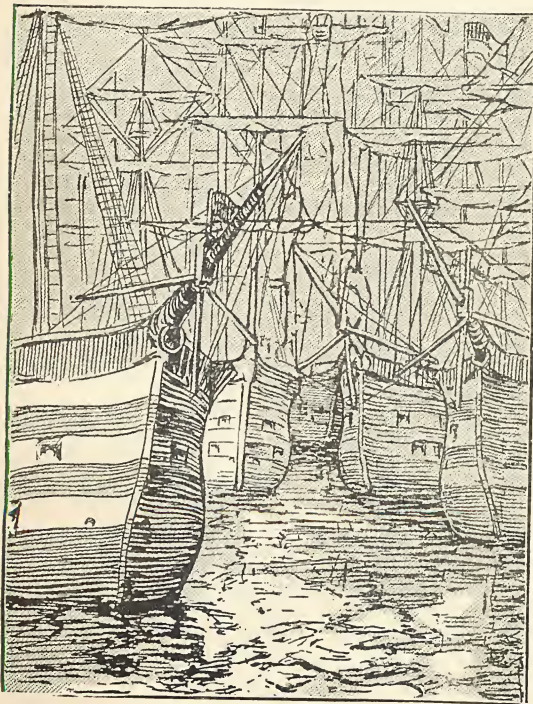
IN the outlying districts of Ceylon, the native runners who carry the night mails always go in couples as a safeguard against attack. Each carries a long spear, to one end of which is attached a small bell, with the object of clearing the way and attracting the attention of the people, while the spear itself is for the more practical purpose of defence against the possible onslaught of wild animals. In the days (not long ago) when such dangers were more real than now, some of the journeys these postmen made were full of adventure, and furnished them with many a tale of peril to tell to their friends.



I.—Find the author of the book.



II.—Find Dr. W. G. Grace.



III.—Find Nelson.



IV.—Find Earl Roberts.

A PAGE OF PICTURE PUZZLES.

LILY AND HER PETS.

True Anecdotes of South American Pets.

LILY'S pets were very many, but she herself was the greatest pet of all. She was an only child, with a face always rather too pale, and big, dark eyes. Her hair was fair, and was sometimes in long, smooth curls, but quite as often very straight. It was hot weather that took the curl out of the hair and the colour out of the cheeks, for Lily's home was in a country of South America where it is always hot. Her father was the Consul, and she had lived there all her life.

The pets made quite a large family, and in their case the advantage of the hot country came in. It was their natural home, and none of them needed more care than would keep them from straying away. Parrots and humming-birds fly about there, as sparrows do here; there are no fireplaces in the houses, and such unpleasant things as cold fingers and chilblains are never thought of.

The pets that ran about as they liked were Bobbie, the terrier; Linda, the Persian cat; Catanita, the blue parrot; and the toucan. There were cages in the long corridor above the *patio*, or garden inside the house, and near the kitchen, for the pair of calzoncitas, or parakeets, the cara sucias, and the three love-birds; while down below, in a second *patio*, where Lily's own orange tree, planted when she was only two days old, grew, was the stable for her donkey and her father's mule. The corridor was a good place in two ways: it was sheltered by creepers from the hottest sun, and it was close to the black cook, Maria. She was so kind that no one else needed to think about the feeding of this large family.

Bobbie was a great favourite with every one. He was born in England, and was brought out the last time Lily and her parents went to Europe. He was good friends with the donkey and the mule, and at one time was very fond of following them when Lily and her father went for their early morning ride. Alas! poor Bobbie! He liked to do a little hunting by the way, and one sad day he was hunted himself! His inquisitive poking in the bushes disturbed a snake—happily not a poisonous one—but he made it so angry that it bit him badly. His mouth was sore and swollen for some days, and he never again went for an early run. It could not enter his dog's mind that he could enjoy his fun and leave the hunting, and he never forgot that snake-bite. At one time he condescended to go for walks with Lily and her governess. If they went beyond the town, which is very hilly, to a sandy plain just outside it, he was in great glee. He rushed about in wild excitement, throwing up the loose sand in little showers and rolling over and over, as if he could not have enough of it. But he suddenly seemed to begin to grow old (or lazy). If he was called he pretended to be very eager, and followed his mistress for a few steps; then turned tail and went back to doze away his time on the hot stones of the *patio*. Nothing roused Bobbie so much as a 'Feast Day,' when rockets were being fired, and bells rung from morning till night. He grew so furious at the noise that it often seemed as if he must hurt himself by his barking. But, however lazy Bobbie became, he never forgot one

thing, to trot down to the Consul's office just before each meal and escort his master up to his room.

The Persian cat's name, Linda, means pretty, and she was as pretty as the name. Otherwise Lily found her a little unsatisfactory. She was as fond of sleeping in the sun as Bobbie was, but her pet spot was along the railing hidden in the vine-leaves, and she never cared much about being petted and played with. She had once had some kittens, just two, which had soon died, and Lily thought that, as she said, 'She is always thinking about them, and doesn't want me to bother her.' So Linda was soft and graceful, with a beautiful grey coat, but not a cat of which one would grow very fond.

Catanita was much more amusing. She was so tame that she spent her life among the trees and creepers in the *patio*, and never seemed to think of flying away. Her bright blue wings and mischievous black eye could easily be spied among the foliage, and she gave a sort of scream as answer when she was called, but never learned to talk. Catanita's naughtiness was the funniest part. She was a terrible thief, and she knew quite well that she had no business to steal. One side of the dining-room was always open to the *patio*, unless it was raining very heavily. The upper portion of what would be the wall in our climate had lattice shutters, and could be closed in; but down to the floor were only railings, covered by a grape-vine, much like a balcony outside an English drawing-room. At the end of the room, near a door leading to the kitchen corridor, was a marble table which did duty as sideboard. Catanita knew breakfast-time (our English luncheon) and that table very well indeed, and she knew that the maid would leave some of the dishes there while she was handing the others. It rarely happened that the parrot did not find her way to that corner of the vine before breakfast began, and she snapped up many a mouthful of rice, fried plantain, or whatever vegetable was being served. Suddenly, in spite of all her care, she would rattle a spoon. 'Catanita!' a voice would cry from the table. That warning was enough. She disappeared, but only to return as soon as she believed herself forgotten.

Lily dined early. Her meal was set out on a little low table, and her governess sat and talked to her while she ate it. Catanita knew this time, too, and stole all she could get. She paid no heed whatever to anything Lily might say, but it was curious to see her slink back and scuttle away if Miss Smith raised her finger! *She* had no need to speak! But Catanita was so tame, and so funny in her naughtiness, that every one was fond of her.

Most boys and girls will know what a toucan is like, with his big head and beak, and his bright orange-coloured feathers lighting up the black ones. 'He's all beak!' was Lily's exclamation when he first arrived, and really his beak did seem the principal part of him. He did not live very long, but was found lying on his face one morning, quite dead—from over-eating, every one said, and certainly eating was the only thing he was ever seen to do. The black cook had been too kind.

The calzoncitas were very pretty parakeets. Their name means 'little breeches,' and they really had fluffy, orange-coloured feathers round their legs,

where other birds are usually bare and smooth. The rest of their plumage was bright green, and they generally kept themselves very neat and smart. They were half tame, and were often taken out of their cage on holiday afternoons, when Lily and her father could watch them. One sad day they grew wild and flew away. Boys were sent out to look for them and every inquiry was made, but they were lost for some days. At length one was caught, then the other, but they were no longer bright, neat-looking birds; their feathers were dull and ragged, and they were very forlorn. Their sentence was that they were not to be let loose any more, and, shut up in their cage, they soon tidied themselves and recovered their good looks.

The *carasucias* were smaller than the *calzoncitas*, larger than the love-birds. Their name is not so pretty as it sounds, for it means 'dirty face.' In reality, their cheeks were of a dull, yellowish colour, not actually dirty at all, and the rest of their feathers greenish, not anything very remarkable. They came out of their cage at times and were fairly tame, but not so interesting for playmates as the love-birds. These little creatures had one favourite game—to kiss and peck at the top of the Consul's head, just where he was going rather bald! They would climb up his arm and shoulder and play round his head as long as he would let them, much to their little mistress's joy. She would try to entice them away with bits of rice and sugar, but there seemed to be some great charm in the top of her father's head, and they were most unwilling to leave it. The love-birds were only let out for exercise and a game and then shut up again; they would probably have come to some sad end if they had been always free.

Lily would have liked to have a *garza*, or heron, like the one belonging to her friend, Carlito, who lived on the other side of the road; but they are rare in the towns. The *garza* is a small heron, quite white, and it bears on its wings fine white feathers. These lie on the top of the other feathers of the wing, and almost appear to be loose. When the bird is angry he raises them and waves them about in a frantic manner. They only grow in the breeding season. There comes a time when the bird does not want them; he then picks them off and throws them down, and they may be found lying on the floor of the *patio*.

A boy once brought a pet to the Consulate which no one wanted. It was a young crocodile which had been caught in the Orinoco, and was only about a foot long. It was very fierce, though so young, and bit at a stick that the boy had put into its mouth in a way which showed what would happen if he put his finger there instead.


An armadillo was brought another day for us to look at. It was very curious, with its coat of mail, but quite harmless, and it feeds on ants and other small insects. I heard also some strange stories about a sloth, but it had died of starvation. It was too lazy to eat, unless the Consul took it by the scruff of the neck and dipped its nose into milk. It had quite a human-looking face, and long, hairy limbs, and clung all day to the branch of a tree. It seldom moved, and never without groaning; indeed, it is difficult to conceive of a creature so strangely

lazy. When its master was not at home to feed it, it quietly hung to its branch and died.

A very handsome bird was caught outside the town and brought for us to see. Its Spanish name means 'King of the Condors,' and it was large, with black and white feathers, but very fierce, and it fought so hard to get out of the sack thrown over it that we could not get a very clear idea of what it really was like. Poor thing! it had probably strayed right away from some spur of the Andes, or from forest land down the Orinoco, and was fighting its hardest to get back again.

In this far-away country Lily had to do without many things which English boys and girls look upon as part of their life; but she had also pets and pleasures which, over here, would not be possible.

THE DREAM FAIRIES.

 T night, when I am snug in bed,
When I have gone to sleep,
The fairies dance about my head,
And laugh and play bo-peep.
And then they whisper in my ear,
And tell their tales to me—
And oh! what lovely things I hear,
What wonders then I see!

I wish those stories would remain;
But mostly I forget.
Yet every night they come again—
What glorious treats I get!
The grown-ups say it only *seems*
As if I hear and see;
But I know better; all my dreams
The fairies bring to me.

'GREYFRIARS BOBBY.'

AN interesting monument has been erected near Greyfriars Cemetery, Edinburgh, by the late Baroness Burdett-Coutts, in memory of a dog's devotion. This dog followed its master's remains to the cemetery in 1858; from that day, and night after night for thirteen years, it guarded the grave, and only left it to visit a restaurant near at hand for its dinner. At the fire of the one o'clock gun from the Castle, 'Bobby' left the grave, and returned immediately after a hasty meal at the restaurant: on Sundays he dined from scraps laid in a certain place by him on Fridays and Saturdays.

He died in 1872. The facts are well authenticated and were reported prominently in the newspapers during the dog's lifetime. The inscription on the monument is:—

A TRIBUTE
TO THE AFFECTIONATE FIDELITY OF
GREYFRIARS BOBBY.

IN 1858 THIS FAITHFUL DOG FOLLOWED THE REMAINS
OF HIS MASTER TO GREYFRIARS CHURCHYARD
AND LINGERED NEAR THE SPOT UNTIL
HIS DEATH IN 1872.

WITH PERMISSION, ERECTED BY THE
BARONESS BURDETT-COUTTS.



The Monument to "Greyfriars Bobby."



“‘I will give you three minutes to think it over.’”

THE FLOWER-SHOW.

(Concluded from page 154.)

'WHAT a splendid day it is!' thought Tony, as he ran back up the drive.

It certainly was a beautiful day. The sun was almost too hot. It made the grass on the lawn look quite brown. Tony thought that the show looked very nice as he came running across the lawn; but suddenly he saw that every one was standing quite still, and that they were all looking at him in a very funny way. Father and Mother were not smiling. Effie was standing on one leg, and wriggling, and giving little uncomfortable laughs; and Effie's mother looked very shocked indeed. Tony tried to smile, but he stopped running, and began to walk quite slowly.

'Tony,' said his mother, 'come here, dear; we are all waiting for you.'

'Tony,' said his father, 'we want you to explain something.'

'What is it?' asked Tony, looking up at Mother with a frightened face, but his father called him to come to him.

'What have you done with the rest of Effie's strawberries, Tony?' he asked. 'There are only half-a-dozen on the plate now, and Effie says that she put a dozen and a half on the plate this morning.'

'Well, I did,' said Effie, with a wriggle. She was very fond of Tony, and did not want to get him into trouble; but certainly the strawberries had gone.

'I did not do anything with them, Father,' said Tony, hanging his head.

'Think again, Tony.'

'I—I—didn't *really*—at least, I only ate the one that fell on the ground and got spoilt. I did put it back on the plate, but it was all messy, and so I did not think that it would matter eating it.'

'Tony, I want you to tell me the whole truth,' said his father, sternly.

Tony looked still more frightened. 'I don't know what you mean, Father,' he said, with a little tremble in his voice.

'What were you doing when Hetty and Lally came into the tent this morning? Hetty says that you were putting Effie's strawberries down, and that your mouth was all red and sticky. How was that?'

Tony was silent, trying hard not to cry.

'You have told me one untruth already. Try and be straightforward now. I have got to go out in three minutes' time, and I will give you those three minutes to think it over. Perhaps you will be able to explain it to us.'

Then his father took out his watch, and every one was very quiet.

The little hands jerked over the face of the watch so quickly! Mother was looking and looking at Tony; but Tony saw no one. It seemed to him as if nobody could be as miserable as he was then.

Then Father's watch shut with a little 'click.'

'The time is up, Tony: you must go away into the house. I am sorry to say that there can be no show to-day, and doubly sorry because of the reason.'

Then Father walked quickly away, and Tony ran past Mother (who put out her hand to him) into the house, and right away up to the lumber-room.

It was a long, low room, full of old boxes, broken chairs—anything, in fact, that there was not room for downstairs. Tony pushed several of the biggest boxes up against the door to keep every one out; then he flung himself on the floor and cried until his eyes were swollen and red. He kept on saying to himself, 'I did not take them! I did not take them!' But there was no one to hear him, and if there had been, no one would have believed him—except, perhaps, Mother.

Presently he had cried so much that he could cry no more; so he lay very still on the floor and thought about all sorts of things, and at last fell asleep.

He was awakened presently by the noise of the tea-bell. He had cried so much that he was very hungry; but he was afraid to go down, so he began to cry again very sadly.

Suddenly some one pushed at the door, and Hetty's voice came through the keyhole. 'Tony, open the door; Mother has sent you some tea—be quick!'

'Put it down,' said Tony.

His voice sounded so queer and hoarse that it quite surprised him.

'Cross-patch!' cried Hetty, 'Mother says that I am to say that she is going for a walk with us after tea, and you can come if you like; but I don't suppose you will!' Then she banged something down outside the door, and ran off downstairs.

When she had gone, Tony unbarred the door, and found his tea outside. He took it to the window to eat. There was a large plate of bread-and-butter, and Tony's own white china mug, with 'Love the Giver' on it, full of milk.

How nice that milk was! Tony drank it up. Then he kissed 'Love the Giver' hard—for Mother was the giver.

He was not so hungry as he thought he was, but he ate one of the slices of bread-and-butter, and then he lay down on the floor again.

By-and-by it began to grow dark, and the house was very quiet. Outside the windows the swallows flew swiftly backwards and forwards, giving long squeals. Sometimes Tony heard them scratching with their little feet against the walls outside. He wished that he was a happy little bird flying about out there. Mother and the others must have gone for a long walk. Hetty and Lally would be running along by Mother's side, laughing and talking. The big tears began to roll down poor Tony's dirty face again.

Suddenly he heard the front door bang in the distance, and by-and-by Punch's voice came shouting up the stairs: 'Mother, Mother! Hetty! Lally!—where are you all?'

So Tony scrambled up off the floor, and went and opened the door. 'Mother and the girls are out for a walk!' he shouted.

Punch came out of the nursery and up the lumber-room stairs.

'Whatever are you doing up here all by yourself?' he asked.

'I'm naughty!' said poor Tony with a gulp.

Punch stared at his little brother. How red his

eyes were, how white his face, and how dusty and wretched he did look!

'What have you done?' he asked kindly.

'Oh!' said Tony, with a great burst of tears, 'they think that I have eaten all Effie's strawberries, and—and—Father wouldn't let us have th—the—show; but—but I didn't eat them, except one, I didn't, Punch—I *didn't*!'

Punch had suddenly grown quite scarlet in the face. He put his arms round Tony very lovingly.

'Poor old chap!' he said. 'It's all right, Tony. I ate those strawberries. Cook shouldn't have stuck them down in the hall. I meant to go across and tell Effie, as a warning to be more careful, and I was on my way; but I met Jack, and it popped right out of my head. Where's Mother? I will go and tell her.'

But Tony would not go down. He had cried so much that he felt he would rather stay where he was. So Punch went off alone.

Tony sat down very quietly on the floor, and he looked out at the sky, where the swallows were darting to and fro, and gave a big sigh.

Then suddenly he heard steps coming quickly along the passage—not Punch's, not Mother's, but Father's.

Tony scrambled quickly up as his father came in. Last time he had looked into his face it had been so severe and cold—not a smile anywhere. There was no smile now; but it was such a loving, sorry face.

Tony was not a bit afraid any more. He rushed to his father, and flung his arms round his neck. Then Father explained to Tony how hard it was to believe people if they did not always tell the truth; and Tony made up his mind to try very hard to be truthful always, even if he was afraid that he would be punished.

When Mother and the girls came home from their walk they found Tony and Father on the lawn, and Father explained everything to Mother; and then he told Punch that he must not have any supper until he had been round and told everybody that it was not Tony who had eaten the strawberries.

A SAILOR ROOK.

A True Anecdote.

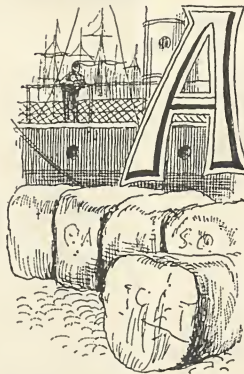
MANY years ago, as the whaling-ship *Diana* was returning from a voyage in the Arctic Ocean, her captain and crew were surprised one day to see a rook, in a state of great exhaustion, flutter into the rigging. The nearest land was more than two hundred miles away, so such a visitor was quite unexpected.

With great care and gentleness the bird was caught, and after receiving as much attention as any storm-tossed traveller would require, it was offered its liberty again. But, though thoroughly restored to health and vigour, it refused to leave the ship. With loud caws of contentment it would hop about the deck as though that were its real home, and when darkness settled down upon the ocean, it retired into the rigging, there to roost as comfortably as any of its stay-at-home relations among their leafy elms. When the Shetland Islands were

reached, the captain of the *Diana* sent his feathered passenger on shore, naturally thinking that this would be in accordance with its wishes; but the next day, when the ship was forty miles farther on the route to Hull, and land was quite out of sight, the sailors saw a dark speck in the sky which grew and grew, till, to their astonishment and delight, the passenger they had left behind fluttered joyously on board, cawing its satisfaction at reaching home once more, if not reproving them for giving it the slip.

After that there was no more thought of parting, and this Columbus of the bird-world became a great favourite with all on board. Sad to say, when the journey's end was reached at Hull, the poor bird, which had found upon the stormy sea such sympathy and kindness, was attacked by a party of ignorant boys and killed.

A COTTON DOUBLING FRAME.

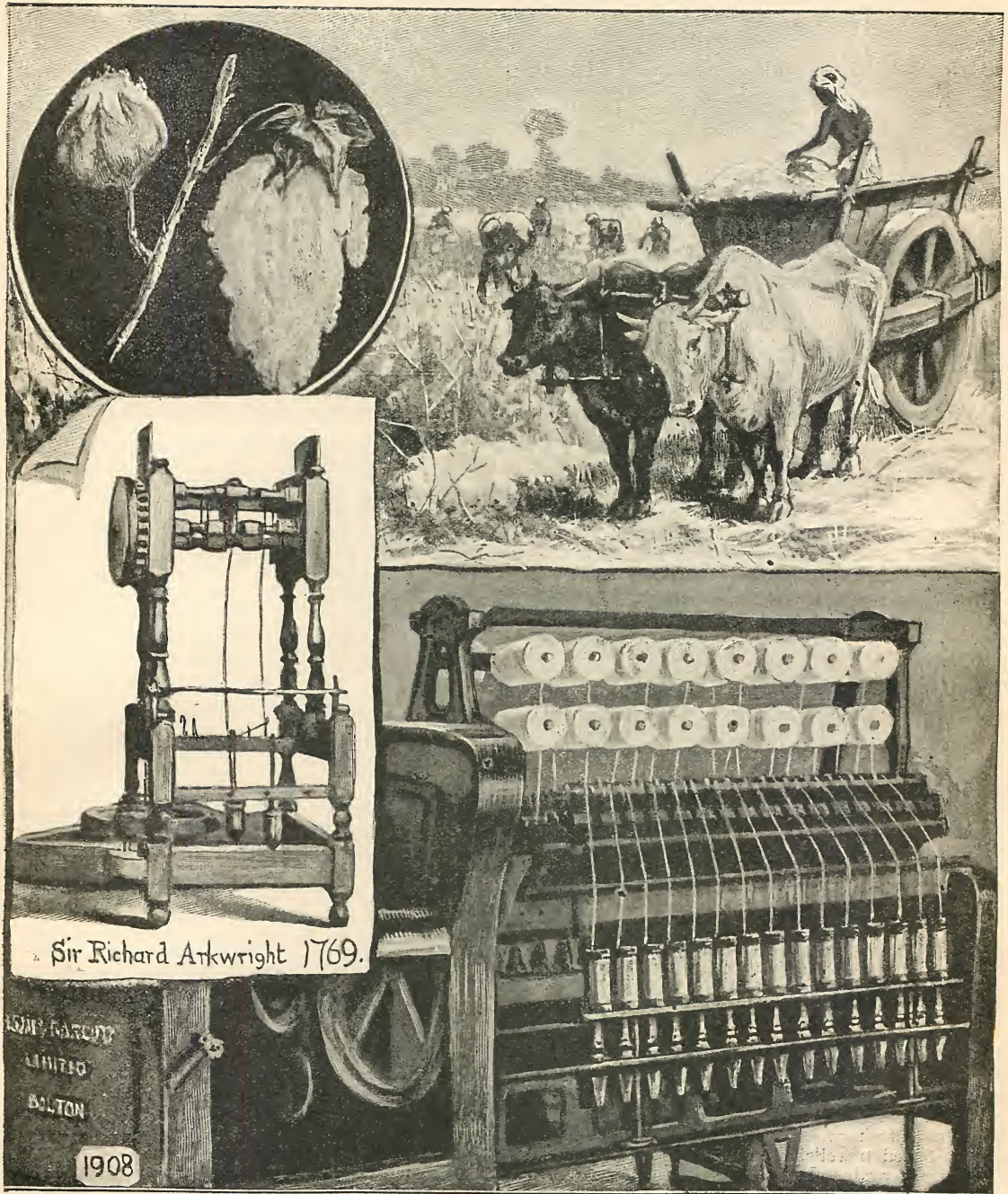


LL that the 'doubling frame' has to do from morning till night is to twist two pieces of yarn together to make sewing cotton. But as the needle is never idle the world over, the doubling frame has no time to lose in keeping up supplies. Really, if we go to the South Kensington Museum, and look at this stalwart giant, with its numberless clogged wheels, shining steel axles, and brass drums, it seems

wonderful to think that it can handle with such delicate care the fine, cobweb-like threads. A few feet away, in another case, stands an old spinning-wheel that has long since retired from business, yet it looks more suited to its task.

Along the upper part of the doubling frame is a long row of spindles containing the yarn, which is led from them between two brass rollers. On issuing from these rollers, the threads are led down in pairs to what are called fliers. As the flier spins round at a rapid rate, it twists the two threads into one, and at the same time winds it round a wooden reel or bobbin. These bobbins (of which there are some twenty-four) rest side by side upon a long steel bar, which is caused to rise and fall slowly while the cotton is being wound, so that it will be spread evenly over the reel, and not all wound round in one place.

Cotton-spinning machinery is ever on the increase, and a short time ago preparations were being made in Lancashire alone for erecting new mills to contain one million spindles, though eight millions were already humming in factories only recently put up. To supply the demands of these hungry spindles, the cotton plant is blossoming in lands where it has never been cultivated before, for the farmers of the West Indies and of Central Africa have put in the



The Cotton Plant.
Arkwright's Jenny.

Cotton Gathering.
A Modern Doubling Frame.

seed and reaped rich harvests to sell in Lancashire. What would the poor little spinning-wheel say if called upon to face such labour as this?

Our illustration is based upon information and photographs kindly supplied by Messrs. Dobson & Barlow, of Bolton.



"Adown the quiet stream we float."

KEEPING HOLIDAY.

A DOWN the quiet stream we float,
On either side a landscape fair;
A rustic bridge the water spans,
A village maid is standing there.

Above are skies of azure blue,
A golden gleam is in the West;
Sweet song-birds carol, 'midst the leaves,
A song of eventide and rest.

No sound of toil or strife is heard,
 The city's din is far away;
 The summer world seems all our own,
 For we are keeping holiday.
 The meadow grasses whisper low,
 Soft winds make music in the trees,
 And flowerets by the water's edge
 Are swaying gently in the breeze.

Forgotten are our tasks awhile,
 Before our eyes is Nature's lore,
 And strength and courage here we gain
 For busy days that lie in store.
 We pause before the rustic bridge,
 Nor haste we on our homeward way,
 Until the fading Western glow
 Foretells the passing of the day.

A HUNDRED YEARS AGO.

True Tales of the Year 1808.

I.—A BALLOON DUEL.

IT was a lovely May morning in 1808. The sun, lately risen, was flooding the country with light, and, early as it was, the inhabitants of Paris were streaming along the roads which led to a large field not far from the Tuileries Gardens.

Here were tethered two large balloons, and as the crowds gathered and stood thickly round the roped enclosure, many were the surmises for what purpose the balloons were to be used.

'It will be for a race,' said one, 'and the winner will have a pretty sum of money, you may be sure.'

'More likely for scientific purposes,' said another.

And so the discussion went on, but none of the guesses came anywhere near the mark. Indeed, it would have been difficult for any one to guess the wicked folly for which the balloons were intended.

It seems that two French gentlemen, M. Granprée and M. le Pique, had quarrelled, and at last they resolved to fight a duel, and being very vain and loving a sensation, they decided that this duel should be fought from two balloons.

These balloons took a month to prepare, but now, on the 3rd of May, all was ready, and precisely at nine o'clock in the morning, two carriages drove on to the field, and the two gentlemen, each accompanied by his second, stepped quickly out.

The seconds bowed gravely to each other, and conversed in low tones for a few minutes. Then they separated, and each accompanied his friend into the car, and the word 'Let go!' was given to the men who held the ropes.

The two balloons slowly ascended; the wind was moderate, and the balloons kept within eighty yards of each other.

The two principals were each armed with blunderbusses, as pistols could not be expected to be efficient for this occasion.

The balloons continued to mount, and were about nine hundred feet above the ground when M. le Pique fired at his rival, but with no result.

Then M. Granprée returned the fire, and the shot penetrated his adversary's balloon, causing the gas to escape. Of course the balloon at once descended

at a headlong rate, and in a few seconds the foolish duellist and his unfortunate second were dashed to pieces.

Meanwhile M. Granprée's balloon rode triumphantly by, and he and his second descended in safety some miles further on.

We wonder what were his feelings when he learnt the death—we might well say the murder—of his unfortunate opponent.

A GREAT EXPLORER'S ADVENTURE.

WHILE Captain Meriwether Lewis, in 1805, was leading the expedition for the discovery of the source of the Missouri, he met with an adventure which nearly closed his career before the accomplishment of his great design. It was when the party was nearing the mighty Missouri Falls. The leader had set off alone across a stretch of almost treeless country, to track a wounded buffalo, when he suddenly found himself face to face with a huge grizzly bear. His gun was empty, and it was not to be expected that the bear would wait politely while he reloaded it. The open waste offered no shelter beyond a few scrubby trees at great distances apart. Captain Lewis, however, decided to make for the nearest of these, and set off without further delay. The bear did the same, and the explorer, soon finding that he would be unable to reach the winning-post first, suddenly turned aside, and made towards the river. The grizzly followed, and the chase was an exciting one, but Captain Lewis won by a few inches, and plunged into the icy stream. He sank almost to the shoulders, holding his gun above his head. Then, turning round, he hailed the bear, who was panting on the bank, with such threatening gestures and such uncomplimentary remarks, that the animal seemed quite impressed. Perhaps the idea of a cold bath was distasteful just then; perhaps some overdue appointment elsewhere induced him to think that Captain Lewis was not worth further loss of time. Whatever the reason may have been, he turned at the river-brink with a growl of warning, and shuffled away. Though the explorer's path led in the direction in which the bear had gone, they did not meet again, and which was the better pleased it would not be difficult to tell.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 163.)

CHAPTER XVII.—A TIGHT FIX.

JUST when the stokers were joining in the fight, Teddy recovered from the blow that had felled him, and saw instantly that the ship was taken. Marley was lying near him, half stunned by a blow on the forehead.

'Dick! Dick!' whispered Teddy, shaking him by the shoulder.

'Hullo!' said Marley, rousing himself.

'Crawl after me. Rouse yourself, or we shall be caught. Quick!'

Marley, with everything swimming before his eyes, and half senseless as he was, yet had life enough in him to do as he was bid. He saw Teddy's form crawling on all fours like a crab before him, and he followed it to the cable-deck hatch. They crept down the companion-way, and Teddy assisted his friend across the cable-deck, along the alley-way, by the square, out into the saloon.

'Let's get into old Lockhead's cabin,' said Teddy. 'There's a curtain to the lower bunk, and we can hide there if they look for us. Oh, poor old Lockhead! I wonder where he is?'

'I feel very sick and faint,' said Marley, sitting down on the edge of the lower bunk.

Teddy looked at the bruise. 'Bless you, it's nothing much! I say, this is a go!' He took a water-bottle out of a rack, and drank feverishly; then he handed it to Dick, who drank in his turn. 'I'm shivering and shaking,' said Teddy; 'so are you. Buck up, old man—buck up! We want all our wits round us. We are just as defenceless as rats in a hole. Hist!'

He suddenly dragged Marley into the lower berth, and noiselessly drew the curtain.

Diego's voice came from the saloon, and the voice evidently of one of the Spanish sailors.

Diego had not joined in the fight; he had been close hid in the testing-room. Now he was talking in a high-pitched, nervous voice to the man with him.

Teddy listened intently.

The conversation went on, and Marley, huddled close to Teddy in the bunk, and half suffocated, thought it would never cease.

Suddenly Alvarez's voice was heard calling for Diego, and he and the Spanish sailor went on deck.

'This is dreadful!' said Teddy.

'What?'

'What I have just heard. Let's get out of this bunk for awhile till some one else comes. Dick, from what I can make out of their jabber, they have made Alvarez, the real Brazilian Commissioner, prisoner in a house in Madrid, and this chap, who calls himself Alvarez, is really named Ramon Alonez. He has come aboard under false colours, just as I thought; he stole Alvarez's credentials, and the crew are all in his pay. He picked them up in London docks, and paid the boarding-master, who always supplies the *Kingfisher* with men, to ship 'em on board her. Diego is in his pay too. They want to tap the cable where no one can get at them. I heard Diego say that five minutes' use of the cable will make Alvarez and his gang richer by many thousands of pounds.'

'But what use is the cable to them?'

'They're pretending the cable is mended, and they're telegraphing now to Paris from Brazil to buy up all the diamond-mine shares on the market; the telegram is going under the secret code of the Brazil Government to the Brazilian embassy. Well, the result will be that the diamond-mine shares will fetch double to-morrow what they do to-day.'

'How will that do any good to Alvarez?'

'Why, if his crowd own half the diamond-mine shares, they'll sell out and double their fortune. It will look as though the Brazilian Government has

some private information, and wants to make a good investment.'

'I see,' said Marley.

'And the cleverness of that beast,' went on Teddy, 'to get all the cable-hands out of the ship before the fight began! The Kipper alone would have downed the lot of them, and Alvarez knew it. But we are in a horrid fix. I heard Diego say he believed we had been sent off in the boat with the others, and he was awfully wrathful about it; said he had old scores to settle with me. That means trouble for me,' said Teddy quite calmly, 'if we are caught, and the same for you, Dick, for you'd be a witness against him.'

Marley was not a coward, but at these words, that he felt to be true, his lips became dry as pumice-stone and he felt a catching at the heart, as if there was a string round it, and some one was pulling it taut from behind.

Suddenly, Teddy, who was sitting beside his friend on the edge of the lower bunk, flung himself back and chuckled.

'I can't help it!' he exclaimed, 'not if I was dying. Oh, Dick! you should have seen old Lockhead when I shouted out to him that the crew had risen and were taking the ship. He came prancing out of the paying-out office with his spectacles on his forehead, shouting out for some one to find them for him. I told him where they were and he fixed them on his old nose, and didn't he go into the fight like a good 'un!'

'Don't talk so loud,' said Marley in a whisper.

'Right,' said Teddy, suddenly regaining his gravity. 'What a fool I am! See here, I have an idea. Do you know I believe I am sometimes thinking with one part of my brain, whilst I'm talking with the other. We must get out of the ship at all costs. Well, just as the fight began I ran on to the after-gratings to get the spanner of the Kelvin engine, and the dinghy was towing astern.'

'Couldn't we escape in her?' said Marley, his face lighting up.

'That's just my idea,' replied Teddy. 'If we could only get aft unnoticed, it's only ten yards or so from the saloon hatch to the after-gratings; we could pull the tow-rope up taut so as to get the dinghy right under the after-rails, slide down the tow-rope and into her, and away.'

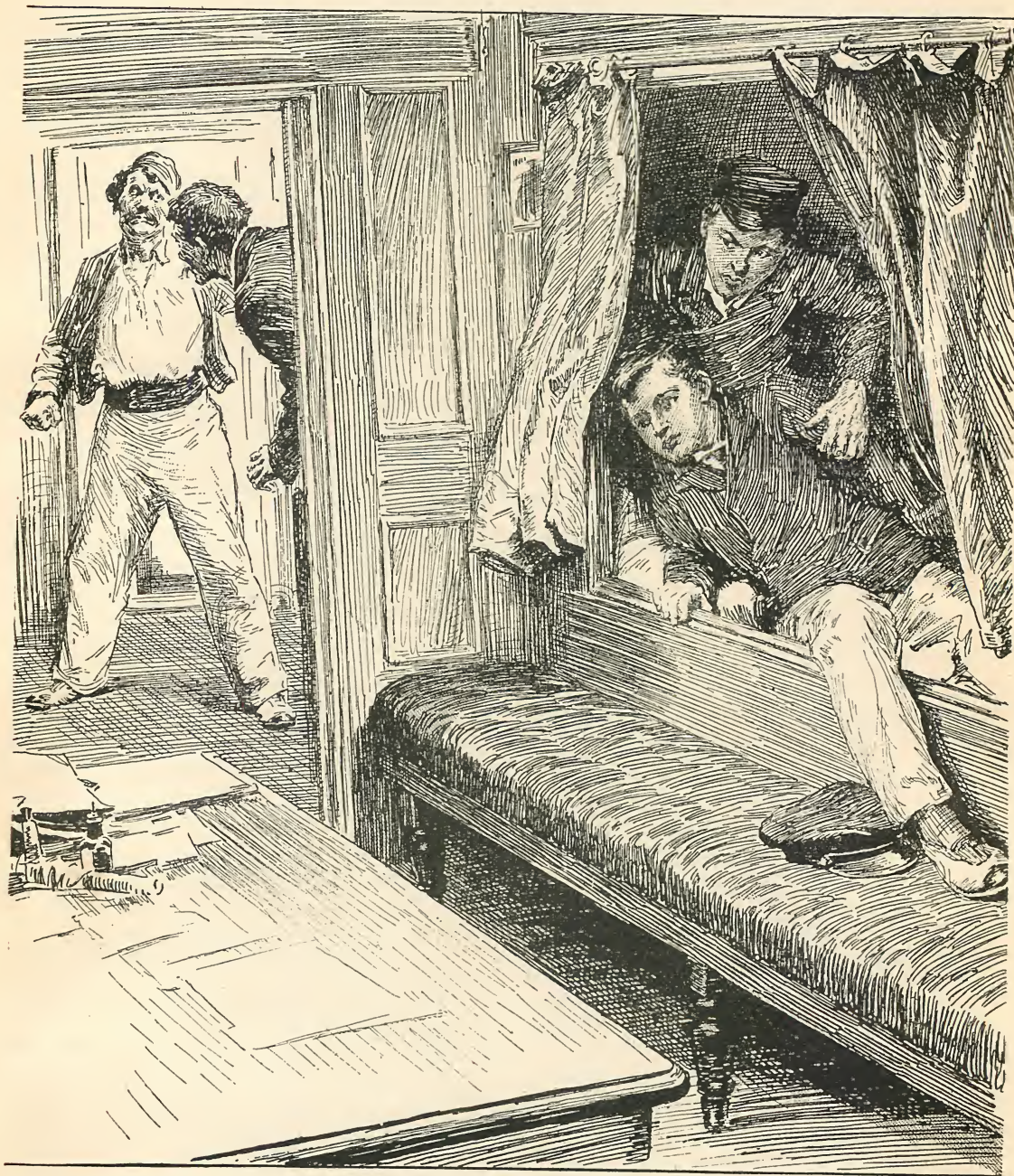
He climbed on to the upper berth, and looked through the port-hole.

'It's getting dusk quick, and there's a fog coming on,' he said. 'I can't see the water for more than a hundred yards. Dick! we shall do it!'

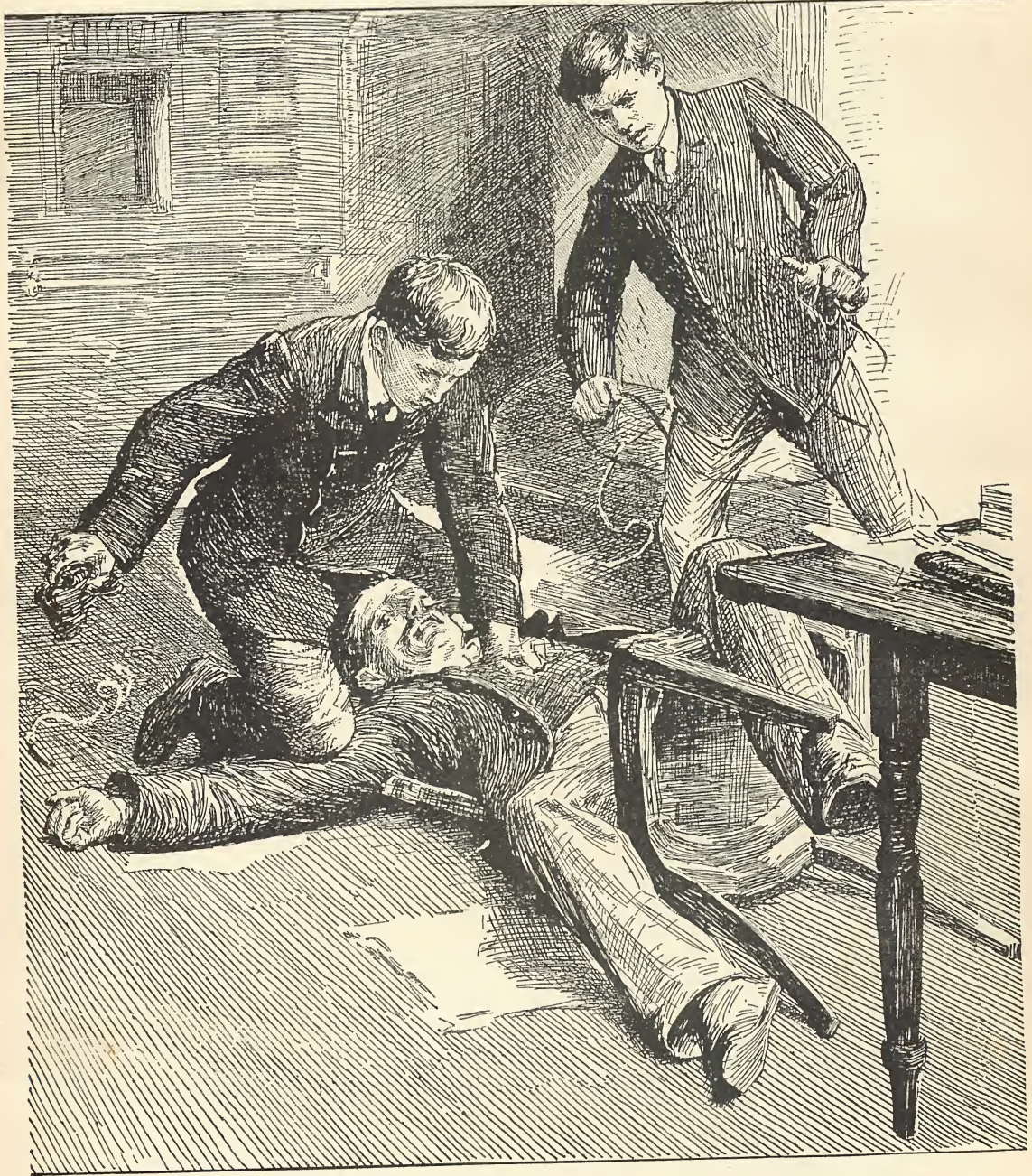
Marley's heart beat. The thought of freedom and escape came to him as a breath of fresh air to a person suffocating. His admiration for O'Brien's daring and quickness of resource became enthusiasm, and he was just going to express it when Teddy shoved him back into the bunk, crawled in beside him, and drew the curtain.

Diego had come down to the saloon with Ramon Alonez. Teddy could hear them taking their seats at the saloon table, and he could hear the fizz of a soda-water syphon. But he could not catch a word of their conversation, for they spoke in a low tone.

(Continued on page 178.)



"He suddenly dragged Marley into the lower berth."



“Diego found himself flat on the floor.”

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 175.)

AS Teddy listened, through an opening in the curtain his eye caught an object, or rather a pair of objects, hanging on the wall of the cabin—a pair of long worsted stockings. Mr. Lockhead, who suffered from rheumatism, wore long, thickly-knitted grey worsted stockings, and this was a pair of them.

Teddy noted the stockings, then he put his hand in his pocket and found a ball of three or four fathoms of cod-line.

Diego and his master talked for perhaps ten minutes, and then Alonez rose and went on deck, leaving Diego alone, sitting at the table and smoking cigarettes.

Teddy slipped out of the bunk and peeped through the crack of the half-opened cabin door. Diego was sitting with his back to them. Marley had also crawled out of the bunk, and was standing by Teddy, who was stuffing Mr. Lockhead's stocking into his side-pocket.

Both boys wore light deck-shoes, and so could move about as silently as if they were in their bare feet.

Teddy, leading the way, stole up behind Diego, and suddenly that personage found himself flat on his back on the saloon floor, with Teddy kneeling on his arms—the surest way to secure any one. The Spaniard's mouth opened to give vent to a shout, and a worsted stocking went round and over it.

'Tie his ankles together with the cod-line,' whispered Teddy, 'whilst I stuff his mouth. What a mouth the chap has! I've got a lot of stocking into it.'

The other stocking he tied tightly over the unfortunate Diego's mouth, taking care, however, that his nose was free.

'Now roll him on his face,' commanded Teddy, and they rolled him on his face, and Teddy tied his wrists together with the cod-line, making a tom-fool knot, that is to say, a knot that no one can unloose without cutting it.

'Now drag him along to Lockhead's cabin,' whispered O'Brien, and they dragged him along like a sack of meal, trundled him into the lower bunk, and drew the curtain.

'Now,' said Teddy, 'is our time; some one may be down any minute. Keep your pecker up, Dick, and follow me.'

CHAPTER XVIII.—THE PATIENT SHARK.

A THICK fog had come up from the Atlantic. There was no one apparently aft, and everything seemed favourable to their escape.

It was full dusk, too, and they caught a momentary glimpse of the forward part of the ship, as they crept out of the saloon companion-way hatch. It was lit up by the arc lamps whose light came struggling through the fog, and evidently Alonez and his crew were still busy with the cable.

Suddenly they heard his voice shouting out for Diego.

'Quick!' said Teddy, and a moment later they were on the after-grating. Teddy looked over the rail, and his heart jumped towards his throat.

There was no need to haul the dinghy under the after-rail, for she was there hauled taut up and ready to be dropped into. Who had hauled her up like this?

Between the darkness and the fog, he could not tell whether any one was in her. To slide down the rope might mean a rude shock when you reached the dinghy. But there was no use in thinking, not a bit.

'I'll go first,' he whispered to Marley; 'you follow, but not till I'm in the boat.'

He slipped over the rail and down the tow-rope. The dinghy was empty. Then Marley followed, and as he dropped into the dinghy he saw a phosphorescent swirl in the water beside it. It was the shark, the patient shark, still waiting for its prey.

Just as Teddy was getting out his knife to cut the tow-rope, something hit him on the head.

It was a small bunch of bananas. The fog had grown thinner for a moment, and looking up in astonishment Teddy saw a small cocked-hat poked through the after-rails.

It was Sloper; the Kipper had dressed him up to welcome the cable on board, and the beast had found a huge bunch of bananas in the steward's room, and taken advantage of the confusion on board to lug it aft and have a glorious feed. He had eaten as much as he wanted, and he was now pelting Teddy with the rest.

'Bother Sloper!' said Teddy, sawing away at the tow-rope whilst bananas hit him on the head and back and bounced off into the boat. 'The beast will give the whole show away if any one sees him—thank goodness!'

The rope parted.

'Now, out oars!' said Teddy, seizing a scull whilst Marley seized another; 'out oars and row for your life!'

Just at that instant Admiral Sloper's head vanished, and the back of a man appeared coming over the railings. So sure was this man of the dinghy being beneath him, that he did not look first to ascertain if it was there or not.

Teddy saw him slipping down the rope towards the water; next moment the fog shut him from view; next, the boys in the dinghy heard a sharp exclamation, followed by a shout, as the man touched the water and found no boat awaiting him.

Then came a voice through the fog: 'The dinghy is gone!'

'It was the Russian Finn' said Teddy, as they rowed away at full speed. 'I know his voice. Buck up, Dick! We must get well away before he rouses the whole ship. Happily, they can't see us in this fog. I wonder what he wanted the dinghy for? But don't let's think of it; let's be thankful, man, we have escaped.'

'I am thankful,' said Marley, 'deeply so.'

'But it's not enough to be thankful,' went on O'Brien. 'We must put a long distance between ourselves and the *Kingfisher* before dawn. I wonder where the cable-hands and the rest of them can be?'

They bent to their oars, and rowed in silence. They had been pulling for more than an hour when Marley gave in.

'Spell, oh!' cried Teddy, unshipping his oar from the rowlock; 'we have put a good way between us and them. I wish we had a compass with us. You see, we may have been rowing all this time towards Gommera or Heiro, and the next place we may find ourselves is on the rocks, my boy. Hullo!'

A bright light suddenly appeared glimmering through the fog before them.

(Continued on page 190.)

PUZZLERS FOR WISE HEADS.

9.—NUMERICAL PUZZLE.

My 4 5 6 is a little deer; my 1 2 3 5 6 is a heavenly body; my 8 9 11 is a silvery-white metal; my 6 10 4 is a toy with which boys play; my 3 2 8 9 10 11 is the act of moving; my 4 5 11 is something to write with; my 3 7 6 5 is something very small; my 3 2 4 is used for cleaning floors; my 1 2 6 8 10 11 is a plant; and my 4 1 11 5 is a tree. What am I? R. M. B.

10.—ANAGRAMS: NAMES OF NOTED AUTHORS.

1. What an old term!
2. Come, I will wrap.
3. Moth, jam, noses.
4. Ass? Mule? Oh, no! J. N.
5. Err, robbing town.
6. Gore, gore, brow.

C. J. B.

[Answers on page 211.]

ANSWER TO PUZZLE ON PAGE 147.

8.—P A R T
A L O E
R O L L
T E L L

OLD NEWSPAPER ADVERTISEMENTS.

OUR oldest English newspaper is the *London Gazette*, which was first published in 1665, and has appeared regularly twice every week since that time. The first twenty-three numbers were, however, called the *Oxford Gazette*, the Court being then at Oxford to escape the Plague, which was raging in London.

The next oldest newspaper that has continued without a break from its first publication to the present year is *Berrow's Worcester Journal*, which first appeared in 1709.

Advertisements formed as important a part in the newspapers of our forefathers as they do of ours. We give two specimens.

The first concerns a lad who had evidently given a good deal of trouble at home: 'I know of a witty arch boy that is apt to play by the way when he goes on errands; would be disposed to a master of ship, if any wants such.'

The next is also somewhat quaint in its requirements: 'I want a complete young man that will wear livery, to wait on a very valuable gentleman, but he must know how to play on a violin or flute.'

SOME FAMOUS CASTLES AND PALACES.

III.—DUNLUCE CASTLE.

IRELAND can show a good number of castles of the olden time (many of them now in ruins), but they are less known to people generally than those to be found in Great Britain. When it was inhabited, the folk who lived in Dunluce Castle must have had plenty of fresh air at all seasons, so exposed is it to winds from land and sea; but the castle was not very lofty, or it would not have stood the rough weather so long.

Not far from that noted spot, the Giant's Causeway, Dunluce Castle stands upon a perpendicular rock beside the coast of Antrim, to which it is joined by a ridge a little above the ocean. The builders must have had hard work, but they put the materials well together, five, perhaps six centuries ago. Strong were the walls and many the rooms; beneath the castle existed a curious cave with sides and roof of basalt, into which the sea flowed; at low water the bottom, of large, smooth stones, could be seen, and on the south side was a small entrance.

Once the property of the Earls of Antrim, who were also Viscounts of Dunluce from this barony, the castle came into the possession of an English family in the fifteenth century. Later, in the reign of Queen Elizabeth, it was held by an Irishman, nicknamed 'Yellow Charles,' who was rebellious, and was besieged in the castle by Sir John Perrott, Lord Deputy of Ireland. Sir John had cannons and culverins brought to Portrush by sea, and dragged across the country to Dunluce, going with them himself. When they came near the castle, the defenders kept up such a heavy fire of small shot that the soldiers were rather afraid to put the artillery into position; but Sir John was not to be daunted: he got his own servants to help him, raised mounds, and fixed the cannon, firing the first shot himself against the walls. For some time the balls did not seem to do any harm, but at last the castle began to shake, and the garrison had to surrender.

In April, 1642, General Munroe visited the castle and was feasted there for some days; but, very ungratefully, he took his host into custody, calling him a traitor, and sent him to Carrickfergus.

NOT TOO MANY.

HOW many lovely stars are set
Within the midnight sky,
And yet the light of each we need
To see or travel by.

How many lovely flowers must bloom
In meadows green in spring—
Yet we would not have e'en one less
Of any radiant thing.

How many words each day we say,
As hour by hour goes through—
Yet not too many e'en by one,
If they be kind and true.
How many little thoughts must come
To occupy our mind—
Yet we can find for each a home,
If they be sweet and kind.

MOSS-ANIMALS.

IN the glorious days of summer it is pleasant to drift lazily over some clear stream and watch what is going on in the cool depths below, and it is astonishing how much we see after a little practice. But to enjoy this watching to the full, a good magnifying lens is necessary, backed up by a microscope at home, by which the captures of the day can be examined. For some of the most beautiful and most marvellous of these dwellers in this nether world

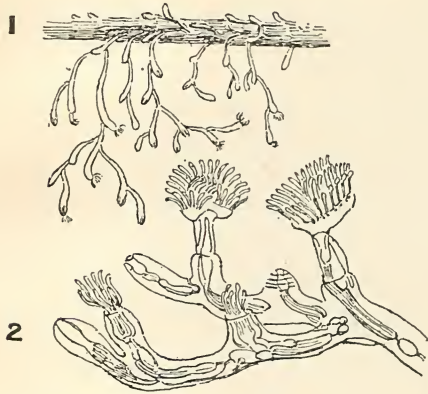


Fig. 1.—Moss-animal, magnified.

Fig. 2.—The same, highly magnified, to show plumes exposed.

are too frail, too fairy-like, to be seen without some such artificial aid. With a lens, however, and a few glass tubes much may be done, even in the open air. The various creatures, for example, known as the 'moss-animals' can well be studied with no more elaborate preparations.

Moss-animals may be sought in many places, but nowhere are they more likely to be found than in the great stems of bull-rushes, or the graceful stalks of 'mares'-tails,' or on the under surface of the leaves of the beautiful water-lilies. Certainly our first view of them will not seem to promise much, for all that can be made out is a series of branching threads (fig. 1) attached to the surface of the plant.

But place a piece of the stem or leaf in a tube full of water, and carefully await events. Very soon, by the aid of the lens, these fine, lace-like branches will be seen to put forth very delicate plumes (fig. 2), which, expanding, keep up a ceaseless but slow and stately waving movement. These waving plumes give a strangely moss-like appearance to the whole, hence the name 'moss-animal.' A more careful examination under a microscope will show that these plumes

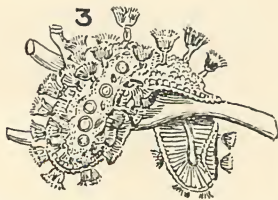


Fig. 3.—Cristatella, highly magnified, climbing over weed.

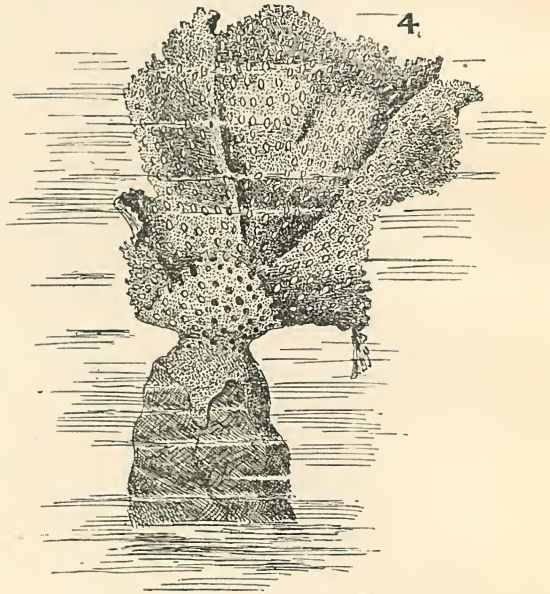


Fig. 4.—Lace-coral.

branch in fig. 2 are formed by this withdrawing of the plumes into their sheath. In a minute you will see them slowly appear again, and all will go on as before. In fig. 2 you will see what the microscope reveals. Here are two fully opened plumes, and others just emerging from, or quite withdrawn into, their protecting tubes.

The waving plumes are so many engines of destruction to smaller creatures, for their surface is

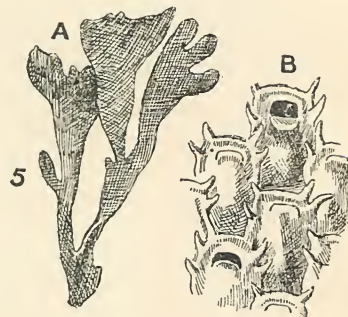


Fig. 5.—A, Sea-mat. B, The same, highly magnified.

beset with minute threads, which, by their vigorous lashing movements, set up currents of water so strong that the tiny passers-by are drawn downwards to the creature's mouth, which is placed on

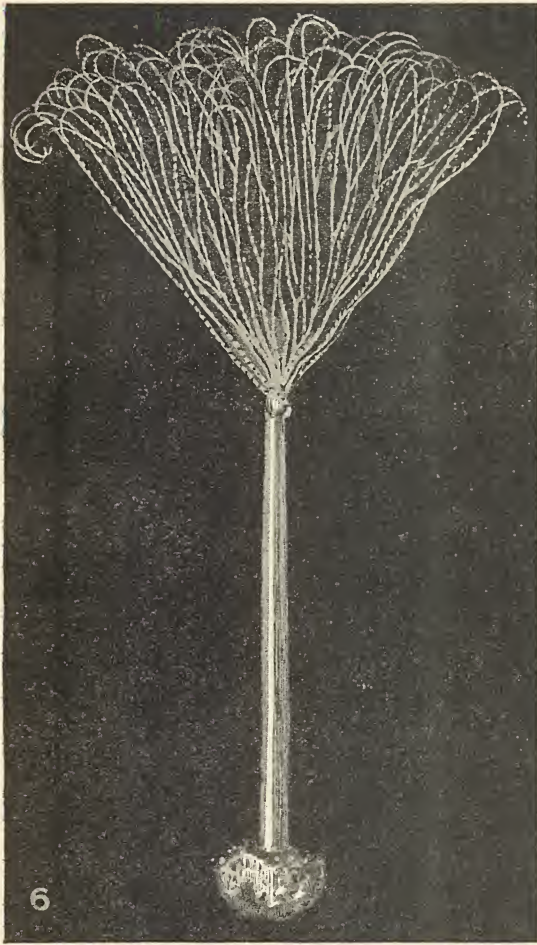


Fig. 6.—Tree-like Sea-plant.

the horseshoe. Each plume represents an entire animal, so that you see the whole series of plumes is a sort of colony, which, when seen with the naked eye, has all the appearance of a leafless plant of some sort.

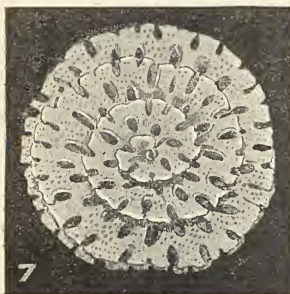


Fig. 7.—Spiral Sea-plant.

differs from its plant-like relatives in that the whole colony is in constant motion. In fig. 3 you will see one drawn, highly magnified, as it appeared when

climbing over the stem of a piece of weed. But fixed plant-like colonies are the rule among the moss-animals.

It must not be supposed, however, that these strange creatures are confined to fresh water. On the contrary, the sea may be regarded as their natural home, for here they attain their highest development, some colonies taking the form of corals, as in the lace-corals, for example, shown in fig. 4; while others



Fig. 8.—Coral-like Sea-plant, nearly natural size and highly magnified.

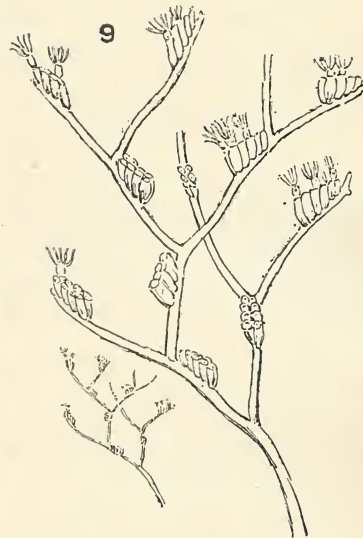


Fig. 9.—Branching Sea-plant, nearly natural size and highly magnified.

what a piece of a sea-mat looks like when highly magnified. This magnified portion shows five empty houses, once occupied by live moss-animals. In fig. 6 is a curiously tree-like form, which has received no English name, but is known by the scientific name only, *Kinetoskias cyathus*. In some respects it recalls one of the sea-lilies. A still more peculiar form is seen in the beautiful spirally-coiled creature in fig. 7. Another coral-like growth is seen in fig. 8,

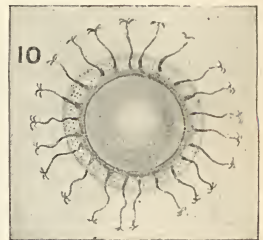


Fig. 10.—Fresh-water Plant with Spines, highly magnified.

bear a very remarkable resemblance to seaweed. Most of you, indeed, have come across the dead skeletons of such colonies without realising the fact when at the seaside, for the so-called 'sea-fir' and 'sea-mat' (fig. 5A) are not really seaweeds at all, but the dead skeletons of moss-animals, or polyzoa, as they are called in scientific books. In fig. 5B you will see

with some of the animals fully expanded, thereby increasing the resemblance to the coral. This is known as *Aleyonium*. In fig. 9 we have a branching form, recalling that of some fresh-water types.

The fresh-water forms all die down as the cold of winter approaches. But before perishing they secure a succession for next year by means of special 'buds,' which are set free into the water in the form of seeds, protected by a horny case. Generally they are provided with a ring of air-cells, which serve as floats, while some are further provided with spines, as in fig. 10. With the genial warmth of spring these 'seeds' burst forth into life, and form new colonies.

W. P. PYCRAFT, F.Z.S., A.L.S.

A RIDE ON A LION.

A CRIMEAN veteran, R—, who died not long ago, was well remembered in his native town, Nottingham, for an act of extreme bravery.

It was market-day, and the streets were crowded with people, when by some means or other a lion managed to make its escape from a travelling menagerie.

The terror amongst the townspeople was very great; they fled hither and thither in their panic, trampling down all who opposed their flight. On came the lion—growling, and killing two dogs who got in his way.

Suddenly R— appeared, and flinging himself on the lion's back, he caught hold of its mane, and succeeded in holding it back till the keepers came to his assistance, and, chaining the beast, dragged it back to its cage.

R— was mauled in his brave efforts, but not seriously hurt, and seemed to think but little of the act which had doubtless saved many lives.

THE MASULA BOAT.

IN the days before the seaport of Madras had provided itself with a strong protection against the heavy surf of the Indian Ocean, it was necessary for all passengers to be landed from ships in native boats, the ships themselves keeping at a safe distance from shore. The craft most usually employed was known as the Masula boat, and was constructed of mango-wood, the planks being *sewn* together with cocoanut fibre, and the joints made partially water-tight by having straw forced tightly into the crack. When a steamer arrived, the Masula boat put out through the surf, rowed by twelve men with bamboo paddles, while the captain steered with another oar in the stern. To regulate the movements of his men, he kept up a monotonous song, raising and lowering his voice according to the speed at which he required the oars to be plied. We can easily imagine that when this frail barque reached the ship's side, it was only those travellers with the strongest nerves who could willingly trust themselves to its care.

On one occasion, while making the dangerous voyage to land, one of the passengers, a well-known Government official of the day, commanded the steersman to stop singing, as the noise fidgeted him.

'If I do,' was the reply, 'I will not be responsible for the safety of the boat.' He was allowed to go on, and, indeed, the song had a great deal to do with the safe piloting. Masula boats are but little used now for passenger traffic, though as lately as 1884 there were a hundred doing service at Madras.

IN SCHOOL AND OUT.

II.—THE TWO DETECTIVES.

FROM time immemorial there had been warfare at Canbury between the town boys and the Grammar-school boys. Sometimes it slumbered into an apparent peace, at others it flamed up with violence; and it was during one of these periods of outbreak that Anderson Major became Head Prefect of the Grammar School. The Fifth and Sixth Forms ignored the matter as much as possible, unless any particularly annoying episode obliged them to interfere. As a rule, they thought it best to leave the struggle in the hands of their juniors, who were quite equal to maintaining the honour of the school.

But the term after Anderson became head of the school, the town boys chose as their leader an exceedingly daring and capable youth, Bill Carter, the son of a builder, and Anderson and his great chum, Pennefather, were forced to give up some time one day to discussing the matter.

'I suppose we shall have to do something about it,' said Anderson, with a sigh. 'Brown Minor went home yesterday with a black eye, and his mother has written to "Bony" to complain.'

It was the irreverent custom at Canbury to talk of Mr. Davidson, the head master, as 'Bony,' or sometimes Bonaparte, because his father, being a great admirer of the Iron Duke, had christened his son 'Arthur Wellesley.'

'What does Bony say about it?' asked Pennefather.

'Oh, the usual thing. He "trusts to the prefects to put an end to such disorderly exhibitions—they are a disgrace to the school," and so on, and so on. I shall have to give a few lickings, I suppose, to the hardest fighters, beginning with Brown Minor.'

'You'll make yourself jolly unpopular if you do,' said his friend. 'The chaps won't like not being allowed to stick up for the school.'

'I know they won't,' replied Anderson gloomily; 'and I should like to use my own stick on Bill Carter for that Cadet Corps business. The last five times that we have been out marching, he and his crew have turned up somewhere on the road with their wretched band, and have either followed us or marched in front.'

'Why don't you charge them?'

'So we would if Peterson and Williams weren't there; but the masters can't mix themselves up in a row on the road, and, as Bony says, the town boys have as much right to march out into the country with their saucepans and penny whistles as we have to take out our drum-and-life band.'

'How do they know which way you are going?'

'That's what puzzles me. The two masters declare that not a soul but themselves knew where we

were going yesterday. They settled it in the Lower Fourth room, with closed doors, and did not even make a note on paper, they were so anxious to keep the matter a secret.'

'Well, I should put two of the kids to ferret out the whole business,' said Pennefather, rising with a yawn, and making his way across to the fives-courts.

The result of this suggestion was that, before afternoon school, Anderson Minor and his chum, Meredith, also of the Third, found themselves entrusted with the important commission of discovering how information as to the doings of the Cadet Corps was carried into the enemy's camp. It is to be feared that, in consequence, neither boy gave much attention to his Latin exercise.

Meredith, indeed, gazed steadfastly in the direction of the blackboard on which the sentences were written, but his thoughts were entirely occupied with a locked door which stood immediately behind it, and opened into the Lower Fourth class-room. A good-sized cupboard stood in front of the deep doorway, leaving a shut-in space behind, and a brilliant idea had suddenly entered Meredith's head. It would be quite easy to climb over this cupboard, and watch from the disused door, so as to obtain a good view of the next room. Then he would be able to find out whether any Lower Fourth boy was being sneak enough to hide in the room while the masters who officered the Cadet Corps settled the direction of the next day's march. Once before a Grammar-school boy had played the traitor, and what had happened once might happen again, argued Meredith to himself. If, however, he remained quietly watching and listening for at least half an hour after the masters had left, the traitor was bound to come out of hiding, and he would have a good view of him.

After all the boys had left the playground that day, either for home or for the cricket-ground, Meredith went to the old porter with an innocent face and asked for the key of the Third Form room for Anderson—not explaining, however, that the Anderson in question was Anderson *Minor*, who thoroughly approved of his idea. The porter gave up the key without a murmur, and two minutes later Meredith and Anderson Minor had locked themselves into the Third Form room. It did not take Meredith a minute to clamber up Anderson's shoulders on to the top of the cupboard, and then drop down into the doorway behind it. It was an easy drop; but, to his astonishment, he alighted on something soft, which gave such a violent wriggle that it upset his balance. He picked himself up, only to see a pair of legs disappearing over the top of the cupboard. Anderson, however, was quite equal to the situation, and by the time that Meredith had climbed back into the room again, he found his friend holding a small and shabby boy firmly by the collar.

It was Bertie Jones, a wretched little undersized street-arab, who had lately, on the death of two undesirable parents, been transplanted into the country by the kindly school-porter, a cousin of the boy's father. He looked about ten, but was really twelve, and was supposed to spend his spare hours in helping with the school boots, knives, and coals.

'What were you doing behind that cupboard?' asked Meredith, sternly. In size he would have made two of Bertie, though he was only about the same age.

Bertie began to weep piteously. It was an accomplishment that he had frequently found useful. 'Oh, please, sir,' he said, 'I came in with Uncle Jackson, and I saw Mr. Brownger throw some sweets over there the other day and I climbed over, and Uncle forgot and left me.'

This might or might not be a true tale, for many packets of sweets intended for consumption in school took a sudden and unexpected flight into the Fourth Form doorway, and the two boys looked at Bertie doubtfully. The discovery they had made was such an unexpected one that they did not quite know what to do about it, and the boy, seeing his advantage, rubbed his eyes dolefully.

'How would you like it,' he whined, 'if you never had a penny to spend on sweets, and then saw all this lot being wasted?' He produced, as he spoke, two or three dirty and sticky packets from his pockets.

'Shall we take him to the porter?' asked Anderson.

'Oh, don't! please don't!' pleaded Bertie, this time in genuine distress. 'He'd shut me up in the coalhole, and not give me any tea.'

'I think we had better let him go, Anderson,' said Meredith; and the boy, as soon as the door was unlocked, vanished like a streak of lightning.

'We will tell your brother all about it,' continued Meredith. 'We should get into trouble if we did anything to him ourselves. He might be telling the truth about the sweets.'

'Pigs might fly!' answered Anderson, as they went back to the porter's lodge with the key.

Half an hour later the two boys were still in the playground awaiting Anderson Major's return from the playing-fields, when they suddenly remembered that he had asked them to hunt for a cricket-ball which he had sent over some outbuildings into the farthest and most secluded corner of the school-grounds. The grass was long, and they made little sound as they walked. As they rounded a disused coach-house, they came noiselessly and suddenly upon a small boy who was kneeling on the ground, putting a piece of folded paper under a large stone close to a hole in the school-palings. It was Bertie Jones again, and his actions looked so suspicious that Meredith promptly seized him by the arm while Anderson picked up the paper. Bertie wriggled and struggled in vain. Even his tears roused no pity, for the letter was addressed to Bill Carter. It ran as follows:—

'DEAR BILL,—The Cadets will go to Burfield Common to-morrow. A pair of them caught me with my ear at the keyhole, and then believed I was looking for swetes. They are softs. 'B. J.'

But Bertie never received the reward he expected for that letter. He received instead a sound caning from Anderson Major, into whose presence he was dragged by the pair of 'softs.' And from that day the Cadet Corps was able to march in peace, undisturbed by the music of the worn-out saucepans and kettles of Bill Carter's band.



"Bertie wriggled and struggled in vain."



"Kaspar was quite at home in the tiny place."

KASPAR'S SHOP.

An Account of a Styrian Toy-shop.

FAR away in Styria there lies a lake, deep and gloomy; its surface reflects the rugged peaks and rough ridges of the mountains that surround it. Close to the water's edge stands a village. There are very few shops in the village, but in a most prominent position in the very centre of the street is a tiny shed that can hardly be dignified by the name of shop. In the low doorway stands a most curious figure: a man of such small stature that it seems hardly possible that he can belong to the hardy race of mountaineers who people this region. He wears tight leather knickerbockers embroidered with green silk, not reaching as far as his knees; his green waistcoat is fastened with large silver buttons. The coarse knitted stockings are of the same colour as his waistcoat; they are turned down and leave the knees quite bare; the double-soled shoes are studded with large nails to prevent his slipping on the steep mountain paths.

As he stands in the low doorway of his small shop, he may well be pardoned if he feels proud of himself and his work. The poor man started life with many disadvantages; he was quite unfit to work in the salt-mines or to cultivate the soil. He was, of course, unable to be a huntsman or a guide, as for either task great physical strength and a steady head are required; wood-cutting was also quite beyond his capacity; but there was one trade that he was able to follow: by constant application he learnt to be a good wood-carver.

Every peasant house in Styria has an out-building where carving is done during the long winter evenings, when the snow lies high and the roads are impassable for weeks. Every peasant makes his own wooden shoes, and when one peeps into a shed in summer-time, one can always see a section of a tree-trunk standing on the ground and the outline of a shoe cut into the wood. During the next bad weather the shoe will be hewn out of the hard wood and will serve for some member of the family who needs a new pair. Besides this rough work, many peasants make toys, and some possess a turning-lathe. A large proportion of the wooden toys sold in Austria and Germany, and even in England, are made in this country; but the work is badly paid, as the dealers only give poor prices, and the peasants are unable to sell their own produce. Many make their own furniture.

Kaspar soon learnt how to make the pretty toys that were likely to sell well, and determined to get together a little store of money so as to purchase wood of the foresters in autumn, and to work in the winter. He decided not to sell to the dealers, but to open a little shop in the village; he was, however, quite unable to pay the rent of even the smallest shop, and this want of means appeared to be a great obstacle. His cottage on the Sattl, with the little field by it, cost fifteen shillings a year, and he could not afford to pay any more rent.

One day a kind neighbour made a suggestion that seemed very good: he said that Kaspar might have a few square yards of the ground that stood vacant

in the main street, and build a little shop with his own hands; when the materials were ready, the neighbours would all be willing to help him. Kaspar set to work, and very soon a set of planks were planed and polished until they shone again, and with the help of friends the little shed was put up. The floor was made of planks, and was raised some two feet above the level of the road, because floods are frequent in that district. An overhanging lime-tree strewed the road with blossoms, and as Kaspar stood on the top of the sloping plank that led up to his small shop on the first day that it was opened, he felt that no one in the world had ever owned a more convenient shop, and was quite convinced that he was the most fortunate being in the whole world.

The little house was built in the same proportions as its owner, and would hardly have been large enough for a full-grown man to turn round in; but Kaspar, with his careful movements, was quite at home in the tiny place. The sole furniture consisted of a table and two rough benches; two broad shelves held a number of his wares, while other objects hung from the roof or were nailed to the walls. A small table was put on either side of the door when the weather was fine, and some of the toys most likely to attract the passers-by were laid out: wonderful tops made of polished wood, queer little cradles just like punts, tiny models of the real Styrian cradle, made entirely of wood and painted a deep red, lay there all ready for a baby doll. Wheelbarrows, just large enough to contain a cargo of beech-nuts, or possibly a load of mountain strawberries, stood in rows, and could be bought for a halfpenny apiece. Rakes and spades for gardening or working in the sand could also be had, for children in Austria dig among the silver sand of the pine woods and make castles and fortresses just as English boys and girls make them by the sea-shore. The wooden dolls are by no means of an elegant shape, and there is a decided stiffness in their limbs; their toilettes, too, are rather showy than useful. They wear the peasant hat with its immense brim and pointed crown, trimmed with two very long feathers of bright green and brilliant scarlet.

There were cups and saucers wonderfully made, just right for a tea-party that could be given on the mossy root of some old tree in the woods. The cups would not hold very much, but that was not altogether a disadvantage, as raspberry juice and water last much longer when each guest only gets a small quantity. The tiny plates, too, could be piled high with wild strawberries or bilberries.

Inside the shop the shelves were covered with doll's furniture, all in imitation of the objects seen in the peasant houses. There were chairs with sloping seats and rickety-looking legs that bent outwards; chests of drawers painted blue with white flowers; chests for linen, of a bright scarlet with pretty designs. Tiny wooden shoes to fit every doll's foot stood in rows, and Kaspar never allowed the smallest customer to go away unshod. Curious brackets are made of giant mushrooms, cut into two pieces and dried; the surface of the mushroom looks just like the bare flat side of a mountain, and the tiny

log hut standing near the edge of a precipice is surrounded by a railing to prevent any one from falling down into the valley below. Besides wood-carving, Kaspar was very clever at making baskets, and quite a number of them hung from the ceiling.

On the first morning that Kaspar opened his shop the time seemed to go by very slowly; the inhabitants of the place passed, and each had a kind word for him, but no one wished to buy articles that could be made at home. However, they said that he would find plenty of customers later on in the day, when the visitors began to walk about the village. Nine o'clock struck and still no one came; half-past nine, and Kaspar began to be afraid that the people meant to remain indoors all day long. But just as the clock struck ten, a little boy came along the road with his nurse. His grandfather had given him a nickel coin worth ten kreuzer, his mother had found two bright kreuzer in her pocket, and his father had added three more to the stock, so that he had fifteen kreuzer, in all about threepence in English money. Just as he was pulling at his nurse's hand to get her to walk a little faster, he caught sight of Kaspar standing at the door of the new shop. He ran across the road, and in a moment was busy inspecting the various articles that were for sale. It was very difficult to decide what to buy, but at last the little boy went home, his hands full of toys. Kaspar was so pleased to have a customer that he gave him a good many things for his money, and when his mother saw what a number of toys could be bought for fifteen kreuzer, she decided to go to the new shop and see what could be done to reward the little dwarf for his kindness.

After her visit to his store, Kaspar was able to put two white guldens into his cash-box, and he began to think that his business would be a very flourishing one. But after that it began to rain and no one ventured out of doors, and he was obliged to take in the tables and shut up the door of his shop, to prevent the rain from dashing in and splashing his pretty ornaments.

At six o'clock he put the money in his grey leather purse and started on his long tramp back to the Sattl. He lighted his fire and began to cook his supper, which consisted of a cake made of flour and water, cooked in an iron ladle with a handle over a yard long. After supper Kaspar put his money into the little cupboard over the bed and then went to shut up his chickens for the night, so that no fox or owl could get at them. Next morning at four o'clock Kaspar was up; he fed the brown hen; the chickens he let out to pick up worms and grubs in the fields. He spent some time filling up a hole made by some wicked weasel who wanted to rob the hen of her eggs, and then hunted for the thief, but was not able to find him. Then he ate his meagre breakfast of black bread and goat's cheese, and having put a large hunch into his pocket, started off on his long tramp to the village. He was delighted to see that it was a fine day, and hoped that a great many customers would come; but the morning passed, and although children came to look at the shop, no one seemed to have any money to spend. Towards evening a lady bought a basket, but that was the only sale that poor Kaspar was able to

make during the day. He got somewhat discouraged. But next day an excursion from a neighbouring town arrived; the mail-coaches were full of people, and they all wanted to purchase some memento of the place.

Kaspar found it almost impossible to attend to all the customers that thronged into his shop, and when he returned to his little cottage in the evening and counted his earnings he found that he had enough money to pay the rent, and could begin to save up to buy a goat at the annual fair.

The summer months went by very quickly. Some days he was very busy; on others the rain fell all day long and no one ventured out of doors, and he was obliged to return home with empty pockets. But in spite of many disappointments he was always careful and obliging, and people came to his shop because they were glad to talk to any one so bright and contented. At last the time of the annual fair came round; stalls were erected in the streets, and Kaspar was sad when he saw what beautiful toys were displayed for sale. But, strange to say, people preferred his plain goods, and all the children in the place were faithful to their little friend, so that a good sum of money found its way into his pockets.

On the last day of the fair, herdsmen came down from the mountains with their goats, to offer them for sale to any one who wanted to buy one. Kaspar examined all the animals very carefully, and finally selected a beautiful creature with a dark-brown coat and patches of white on the breast and legs. The goat was tame and intelligent, and followed her new master home without giving any trouble. He was delighted to get a bowl of warm milk for supper, and thought of the cheese he would make. The goat was very comfortable in her sweet-smelling stable, and soon became attached to Kaspar.

After the fair, people began to leave for the city, and Kaspar shut up his little shop for the winter months, very satisfied with his success, and fully determined to spend the winter months in making toys that no child would be able to resist, and to work harder than ever to please his kind customers; and thus, by patience and perseverance, he built up a good business in the little shop, where he may be seen carrying it on to this day.

'DON'T TAKE THAT AWAY!'

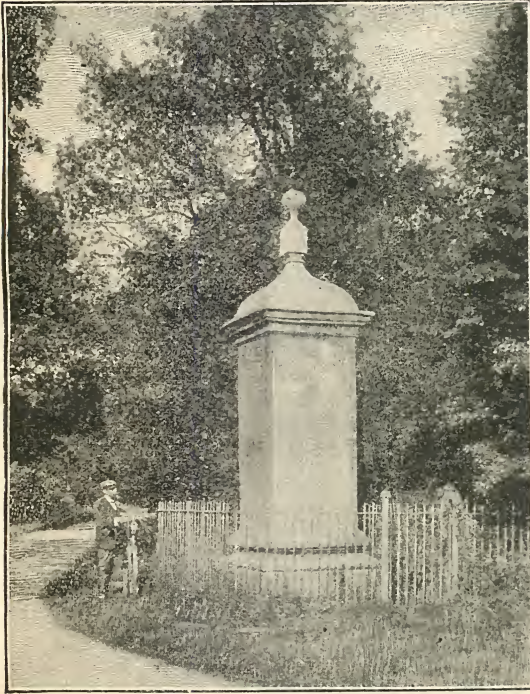
LORD RAGLAN, who, in 1855, commanded our forces in the Crimea, was also at the battle of Waterloo, where, whilst standing by the Duke of Wellington's side, Lord Raglan's arm was shattered by a bullet.

Chloroform was unknown in 1815, and the amputation had to be done in the old, clumsy, painful way; but Lord Raglan seems to have had nerves of iron, for not only did he utter no sound whilst under the surgeon's hands, but when the operation was over he called out to the orderly, 'Hullo! don't take away that arm till I have taken off my ring!'

It was a ring his wife had given him, and the very next day he began to practise writing with his left hand, so as to be able to send her a letter.

THE FOUR-SHIRES STONE.

THE famous Four-Shires Stone at Moreton-in-the-Marsh stands nineteen feet high. Here meet the four shires of Oxford, Gloucester, Worcester, and Warwick, the names being cut on the four sides of the pillar. Roads lead from the spot into all these counties, Worcestershire being divided into



The Four-Shires Stone.

small fragments which are in places almost made into 'islands' by the boundaries of the neighbouring counties.

The stone also marks the spot where a battle was fought between the English and the Danes, in which the Danes, under Canute, were defeated by Edmund Ironside.

Our photograph is by S. A. Freeman.

ANIMAL MAKESHIFTS.

True Anecdotes.

VI.—WASHING AND DRESSING.

ANIMALS, including birds and insects, are most careful in making their toilets. Those creatures which are hastily called 'dirty' are often among the cleanest. There is no animal cleaner by nature than a pig; his true character comes out in his wild relations, who bathe every day of their lives, either in a clear stream or in a mixture of earth and water. We call this mud, but there is nothing dirty in pure earth and water such as the wild pig loves. It is only when piggy can get no clean water or mud that he is obliged to roll and

rub his skin as best he may by wallowing in mire. The rat too, dirty as his habits seem and as his dwelling-place may be, is spotless as to his coat, upon which he cannot endure the least stain, and never rests, if soiled, till he has washed himself, as a cat does. Never does he eat without washing afterwards.

Water is used by the majority of animals for washing, as it is with us, but many creatures inhabiting uplands or dry sandy places use sand or loam instead for dry cleaning. When on a journey the tamed elephant, denied his river-bath, squirts fine dust over his back and legs, taking the nicest care never to sprinkle his rider; but he greatly prefers to sponge himself as he stands knee-deep in a cool stream. It is a pretty sight to see a group of mother-monkeys assembled at the brink of a stream, as if for gossip, while they wash the faces of their little ones, scooping up water with their hands. Perhaps there is no other creature who is so tender and wise a nurse.

Everybody knows the way in which four-footed parents attend to their nursery duties, but few



"He saw the mother-bird wash and dress her brood."

know that birds wash their nestlings in much the same way. A kind and patient naturalist who loved to watch the habits of birds without meddling with them, and who therefore learnt more of their secrets than those who use cruel means, once made a hut out of green branches, close to the nest of a pair



"Scooping the water up with their hands."

of thrushes, into which he crept so that he might see without being seen. He wished to know how they brought up their family. At one o'clock on a cold spring morning, he stole into the hut and hid. At half-past two the hard-working couple began feeding

the nestlings. After their breakfast he saw the mother-bird wash and dress her brood, drawing each tiny sprouting feather through her bill, while with her moist tongue she removed every speck of dirt. This labour of love was done for the infant thrushes

daily till they were old enough to begin dressing themselves. All day the naturalist watched the birds, taking but little food and rest himself. He noticed that once or twice the mother used a little dry earth in cleaning any feather which seemed to need extra scrubbing. When evening fell, and they went to rest, the industrious pair had fed their young no less than two hundred and six times.

Many birds not only use dust for cleaning their skin and feathers after bathing in water, but scrub themselves against thick bushes or grass, by way of finishing off with a rough towel. The present writer knew a tame robin who was a splendid example of this. The funny little bird would often choose sunset, and sometimes a frosty evening, as a time for his tub, which he took in a saucer on the lawn. After completely drenching himself he would repair to the gravel to sit down and sputter about till he looked as bedraggled and wretched an object as need be. Next he flew into a thick box-bush, and made a great bustle and shaking of the leaves while he towelled himself. From the privacy of this apartment he would then pop out, dry, neat, glossy, as if he had stepped out of a band-box, pleased with himself and ready for his supper.

Donkeys, horses, and cows, not only clean their own coats, but help each other to keep the difficult places nice and neat. The neck is that part which animals find hardest to clean; even a cat is puzzled how to do it, and poor pussies condemned to a collar or ribbon find it impossible. In the fields, horses and cows scrape with their tongues or nibble with their teeth the parts in each other's coats which they would fain wish to have scraped or nibbled on themselves, doing as they would be done by. It is amusing to see how they aid each other, too, by standing side by side, head to tail, to swish off the flies from each other's faces.

All creatures living wild in herds form mutual aid societies, and are good comrades in a variety of useful little ways. When the solitary giraffe was brought from his desert home, away from his friends, to be a captive at the Zoo, he sadly missed his company. After the long, painful journey he was in a very grimy state, but soon cleaned himself up, all but his long neck. This he could not wash without another giraffe's help, and as there was no other he was obliged to go about with his neck three or four shades dingier than his body.

Insects are very clean, as anybody can see who will invite a housefly or wasp to feast on a lump of sugar and peep at the guest through a magnifying-glass. How deftly and thoroughly the wasp washes her face, then passes the forelegs one after another between her jaws, cleaning them with the tiniest of tongues, then rubbing them together as if washing her hands. She finishes herself off by polishing her golden-belted body and glittering wings. The glow-worm, lowly and dull-looking enough by day, but brilliant by night, bears a tool at her tail like a shaving-brush, herewith to rid herself from the slime of the snails on which she feeds. We human beings say that cleanliness is next to godliness; if so, it is certain that the lower creatures possess in their far-off way this humble form, at least, of worship.

EDITH CARRINGTON.

LIFE'S ARITHMETIC.

ADD to your store of knowledge
Such learning as you may;
Let each day find you wiser
Before it pass away.
The chain across the river,
Stretching from brink to brink,
It was not forged and cast at once,
But link was put to link

Subtract from all your service
The things that mar and spoil;
Face duties with a cheerful heart,
Without a grumble toil.
'A merry heart goes all the way,'
The poet said of old;
And you shall find a wiser truth
Has never yet been told.

Sweet deeds of love and service
Still learn to *Multiply*;
There is so much that you can do,
If you will only try.
For little hands small tasks are set
That men could never do,
And you may speak so many words
That helpful are and true.

Divide your time up wisely;
Within each several day
There is a time for you to work,
A time for you to play.
And if your time is wisely spent,
And portioned out like this,
Your childhood will be sure to lead
On to an age of peace.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 179.)

'T'S a lighthouse!' cried O'Brien. 'We're all right now. Ship your oar, Marley, and bring her slowly up; sure to be rocks about. Hulloo!' he shouted, addressing the lighthouse.

'Hulloo!' answered a voice.

'It must be a lighthouse on the rocks of Gommerá,' said Teddy. 'Gently, Marley, gently! Just keep way on her, and prepare to back water when I shout. There's no hurry; the lighthouse won't run away.'

They were going faster than they thought, taken by the current, for suddenly, alarmingly suddenly, before them appeared a great ship's bow, a blazing arc lamp swung to a stay, a cable stretching from the bow to the water, and on the bow, in letters of gold, the word—KINGFISHER.

They had been rowing in a circle of about three miles in circumference, and had come back to the place they had started from.

A yell from the *Kingfisher* made them understand at once that they were recognised, and they could hear Diego's voice high above the others.

'Back water—back water for all you're worth!' cried Teddy, as the crackling of a couple of Mauser pistols from the ship was followed by the 'whop-whop' of bullets hitting the water around them, and the long, droning twang of Mauser bullets passing

over their heads. A few strokes took them back into the fog, and the sound of firing ceased, to be replaced, however, by a sound nearly as alarming—the rattle of winch-pawls.

'They're getting a boat out,' said Marley. 'Teddy, we're done for!'

'No, we're not,' said Teddy, 'not by a long way. Row, man, for all you're worth!'

They had not rowed thirty strokes when they heard the crash of oars being shipped.

The Dagoes had tumbled the boat out quickly enough, but they had come off in an eight-oar whale-boat, with only four ash-sweeps, as Teddy could tell from the words he heard shouted.

Still, notwithstanding this, and bad oarsmen as they were, the advantage was with them, and Teddy's trained ear could tell that they were slowly gaining on the dinghy.

'Stop rowing a moment,' he said to Marley. 'I want to alter our course.'

He gave a couple of strokes that turned the dinghy's head a few points to starboard.

'Now,' said he, 'pull ahead, and if they keep on their present course maybe we shall give them the slip.'

But the whale-boat also altered her course. She seemed to possess the nose of a hound, and though the dinghy had, so to speak, doubled, the whale-boat had followed its example.

'It's the sound of our oars that is leading them,' suddenly panted O'Brien. 'Quick, Dick, stop rowing!'

Marley stopped, and O'Brien slewed the boat's head round with a couple of powerful strokes.

'Now,' said he, in a hoarse whisper, 'three strokes together, and then ship your oar.'

They rowed three strokes and shipped their oars, and lay floating idly on the glassy swell.

It was not a bad idea of Teddy's to just step aside and let the whale-boat pass, if possible; and it was their only chance—a fair chance, too, for the fog was now so thick that the boys could not see each other, though only a few feet apart.

The whale-boat was close up to them, coming along and making a great pow-wow.

O'Brien could distinguish Diego's voice crying, 'I can't hear their oars; they have stopped rowing.'

Then all of a sudden the Dagoes hung on their oars, and there was dead silence.

Then all at once—not a yard away seemingly—came Diego's voice complaining of the fog.

The two boats were nearly touching, and it was strange to think of deadly peril being just that short distance away, and nothing between them and it but the fog. The slightest sound would prove fatal, and both boys knew it.

The frightful tension lasted perhaps half a minute, and then came a faint 'Hullo' from a long distance away, apparently through the fog.

It was from the ship. Diego answered it, and then gave some order to his crew. The oars struck the water, almost touching the dinghy, and the whale-boat drew off. She was evidently returning to the ship, for ship and boat kept hallooing one to the other at intervals. Then the voices ceased, and they knew that the whale-boat was on board again.

'Well, if that wasn't the narrowest shave!' said Teddy as he shipped his oar again.

'I wanted to sneeze like anything,' said Marley, 'when they were along-side us.'

'Well, if you had,' replied O'Brien, 'it might have been your very last sneeze. But come on, let's row; we will make a zig-zag course as far as we are able. No more great-circle sailing for me. Good gracious, Dick, but I'm hungry, and we haven't got a scrap of provisions with us.'

'Yes, we have,' said Marley. 'I have just found some. Here are three bananas. Hunt about on the bottom of the boat near you, and see if you can find any more.'

Teddy hunted. 'One, two, three! Hurroo! Here's a bunch with a dozen on it. Good old Sloper!'

'And I've just found another little bunch with six on it,' mumbled Marley with his mouth full. 'We shan't starve.'

There were over two dozen bananas in the boat, a most providential supply of food, for bananas have all the elements of nutrition in them, and will support life alone for a considerable time.

They ate enough to stay their hunger, and then resumed their oars.

'I don't know what they are,' said Marley, who was rowing stroke, 'but there are a lot of things in the boat under the stern sheets. They feel like bundles of clothes when I touch them with my foot, and there is a tin box.'

'A tin box do you say? How big is it?' asked Teddy.

'About the size of a cash-box.'

Teddy rested on his oar. 'Let's stop pulling,' he said. 'There's no use in going on till we can see where we're going to, and we are a good way from the ship by now. Hand us over that tin box. I want to see what it is.'

Marley did what he was bid, and Teddy, when he received the box into his hands, gave a cry of triumph and delight.

'Do you know what this is?' he asked.

'No,' replied Dick.

'It's old Lockhead's cash-box, the ship's money, that's what it is. Lockhead must have had it on his desk when the row broke out, for it's not locked, it's only tied together with string. The Russian Finn must have seen it on his desk and taken it. I say, Marley, this is a good thing.'

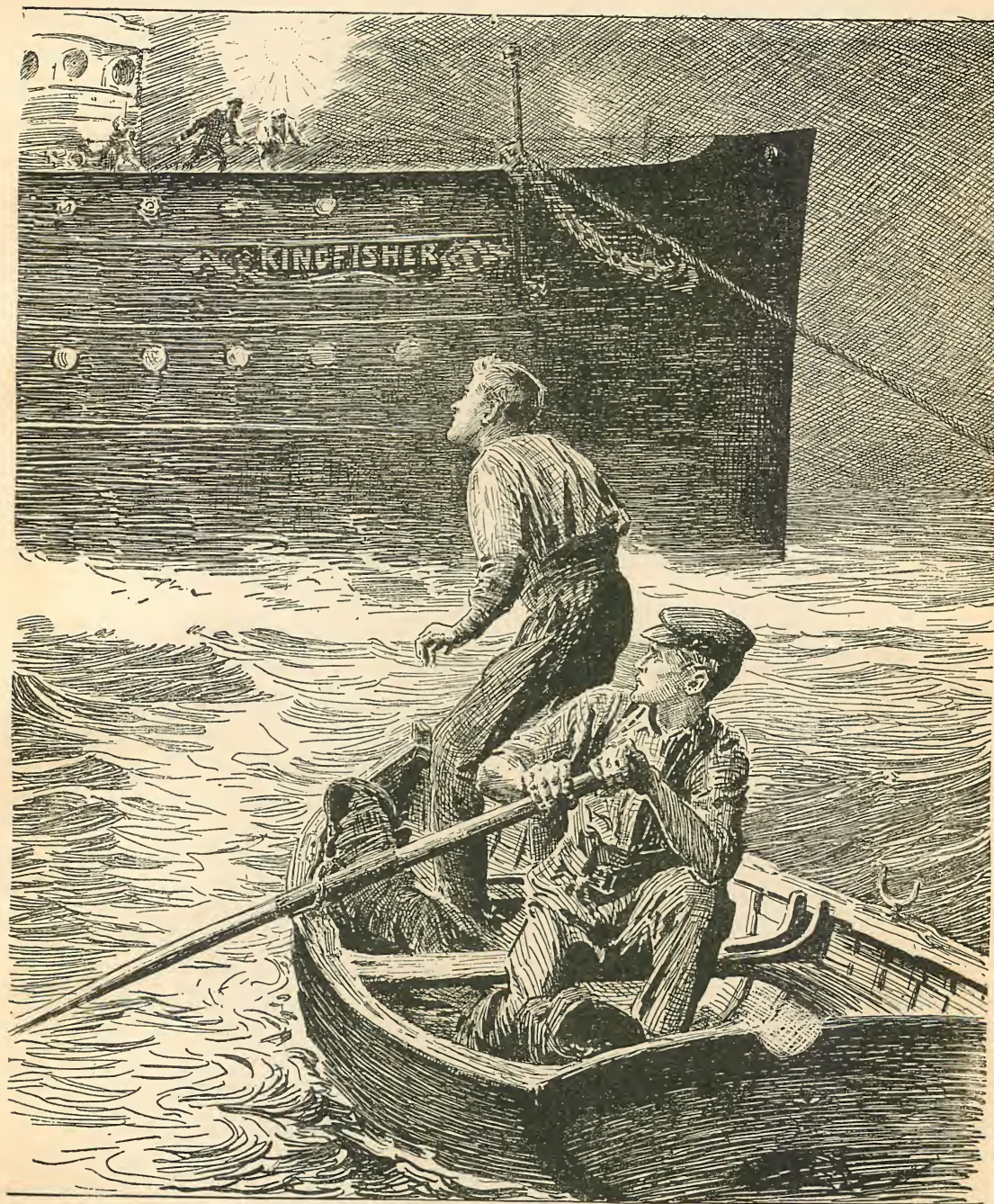
'I should just think it was,' said Marley. 'They won't kick you out of the company this time, Teddy.'

'No,' said Teddy. 'I think I shall be able to hold my own, even against old Sprott and his log, although I did hold the ship up with that blessed shark-hook for three or four hours. This will pay for it; there's a big sum in notes and gold in the box, or ought to be.'

'What on earth did we want with so much money on board?' said Marley.

'Why, in wages, and victuals, and coals, and what not,' said Teddy, 'it costs about seven hundred pounds a week to keep the *Kingfisher* going; at least, it costs Brazil that. A ship like ours must carry plenty of ready money. But I want to see if the coin's safe. I have a box of matches in my pocket; just hold on to the cash-box whilst I get my knife to cut the string.'

(Continued on page 194.)



"They were recognised."



THE COUNTRY PEDLER.



“‘They are deserting the ship,’ he cried.”

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 191.)

TEDDY cut the string, and then, with the lighted match, examined the contents of the box.

The money was safe. Two rolls of bank notes and a little clinking bag of gold were taken out of the cash-box by Teddy, and examined rapidly by the light of a match held by Dick.

'As far as I can see, the money is all here. There's a hundred sovereigns in this little bag: never think it, would you? Now, look here, I propose we divide the stuff and carry it about with us for safety. I'll take the bag of sovereigns and one bundle of notes; you take the other and put it safely in the breast-pocket of your coat. Done it? Well, now feel about under the stern-sheets and trundle out some of those bags you say are there. We may be able to get something to cover us with.'

Marley hunted about under the stern-sheets, and handed out a sailor's bag with a blanket strapped to it; then a huge overcoat belonging to Mr. Toms, which the Russian Finn had also taken.

'That Russian Finn was a clever chap,' said O'Brien as he covered himself with the overcoat in the bottom of the dinghy, 'and he would have escaped with all this plunder only for us. Well, I'm going to have a snooze—you do the same. There's no manner of use lying awake and worrying, and we shall want all our strength, maybe, to-morrow.'

CHAPTER XIX.—THE CHASE.

WHEN they awoke it was day. The fog had cleared considerably, but, though a faint struggle of sunshine came from above, the sea was only visible for a quarter of a mile, or less, round about the dinghy.

'Rouse up!' cried Teddy, throwing the coat off him, and sitting upright in the bottom of the dinghy.

'Oh, good gracious, we're here still!' groaned Marley, as he too sat up, blinking like an owl. 'I was dreaming that I was at home in bed, and my dear old father was knocking at my door and telling me to rouse up—ugh!'

'No use in bothering,' said Teddy. 'Why, you ungrateful beggar, think of all we have escaped! Have a banana?'

'I wish I had that trunkful of grub of Hannah's here now,' said Marley, taking a banana. 'That pie—'

'Don't talk of pies!' said Teddy. 'What's the good of giving a chap an appetite he can't satisfy? Besides, what we want most just now isn't pies, but water. There's not a drop in the boat!'

'Not a drop?' said Marley. 'But, somehow, I don't feel very thirsty.'

'It's the bananas. I've often heard they stop thirst. Here, hand me over that bag of the Russian Finn's. I want to go through it, and see what the fellow has been stealing.'

The contents of the bag were turned out, and a miscellaneous collection of things came to light. There were a gold watch and chain belonging to the captain, and a tobacco-box and a bit of soap,

an opera-glass belonging to Mr. Jones the third officer, half-a-dozen silver-plated spoons and forks, half a box of cigars, a meerschaum pipe, and a whole heap of small and useless articles, ranging from a cut-glass decanter stopper to the brass back of an American clock.

'It's like a magpie's nest,' said Teddy in disgust, as he gazed at the heap of rubbish. 'He made a tour of the ship, and picked up everything he could find. Well, I'll keep the captain's watch and chain, and you stick to the opera-glass and pipe. It's Jones the third officer's, and he would like to have it back. I vote we heave the rest overboard. Oh!'

Teddy had suddenly turned white. He had raised himself up to throw some of the trash overboard, when his eye had caught an appalling object. The haze had now cleared to half a mile, and about a quarter of a mile from the boat, on the surface of the sea, lit by the now strengthening sunlight, floated what seemed a balloon; but it was a balloon with eyes—enormous, broad, vacant eyes—that seemed staring full at the boat, as if in astonishment. And it was a balloon with a beak, a beak entangled in a great grapnel-iron, from which hung a rope. It was the decapod risen to the surface again, and considerably swelled, evidently by decomposition.

'It's the thing we caught yesterday,' cried Marley, 'come to the surface again! Now, Teddy, will you believe in it or not?'

'Well!' said Teddy, staring, open-mouthed, at the floating monster. 'I never could have believed anything could grow to that size. Look at the eyes of it, and the way it carries the grapnel stuck in its beak! And what a beak!'

'I read once,' said Marley, 'that one of these things was cast up on the Irish coast, and its head alone was forty feet broad. I didn't believe it, but I believe it now.'

They got the sculls out and rowed up close to the awful creature, and, even though it was dead, this required some courage; for there was a look in the monstrous eyes as if the thing were only waiting to lure the boat within striking distance and then annihilate it. But it was dead, sure enough. The swell of the sea washed gently against it, as though it were an island, and far down in the blue water they could see the enormous tentacles of the thing, green-brown, like the trunks of vast trees. The beak was curved, and fully eight feet from root to point; the grapnel had caught it by one prong, and was wedged tight. The whole of the upper part of the beak was covered with a growth of small shellfish, like barnacles, only of a dull red colour. At the roots of the tentacles clung a few small spiny crabs,* of a species that neither of the boys had ever seen before.

'Oh,' said Teddy, 'if I had only got my camera!'

'Yes, it's a pity you haven't,' replied Marley; 'for a photograph is the only thing that would make people believe—'

He never finished the sentence, for, drawn by an exclamation of O'Brien's, he looked around. The fog had cleared suddenly—as fogs do when the sun

* Possibly of the species *Neolithodes Grimaldi*. The Prince of Monaco, in one of his expeditions, discovered a specimen of the crab at a depth of 1237 metres (about 4132 feet).

has acquired a certain amount of power. It had risen like the curtain at a theatre, disclosing to the boys a scene tragic enough from their point of view.

A mile and a half away on the blue water, to northward, lay Gommera, with the sunlight on its purple cliffs. A mile or so away to the southward lay the *Kingfisher*, from which two boats were putting out—the whale-boat and a quarter-boat, both full of men.

Teddy seized Mr. Jones's opera-glass, which Dick had laid on the thwarts, and, standing up, focussed them on the boats. 'They are deserting the ship!' he cried, 'the whole crowd. Alonez is in the whale-boat, and Diego is in the quarter-boat, and they have seen us, for Diego is standing up with the ship's telescope right on us. Quick, Dick, out oars! Gommera is our only chance! If we can get there before them, we can hide amidst the rocks, maybe.'

(Continued on page 207.)

EVERLASTING FLOWERS.

WHERE is a lovely blossom
That never fades away,
It keeps a tender freshness
When all the rest decay.
Its blossom is unfading,
Through Spring and wintry hour:
It bears a lovely name—'tis called
The everlasting flower.

And every kind word spoken,
And every pure deed done,
Is like this tender blossom,
The sweet name is their own.
Their grace will never perish,
But last through all life's hours;
They are the fadeless blooms of life,
Its everlasting flowers.

THE HISTORY OF A TIN OF SALMON.

HOW many of those who eat tinned salmon consider how much trouble and ingenuity have been required in order to place it on our tables? As many readers know little about the life-history of a tin of salmon, I will try to tell you all about it.

If you look at your map of Canada, that great country where many English people have made their home, you will find a province in the extreme west, sloping down to the Pacific coast, called British Columbia. Here there are large, beautiful rivers, where many thousands of salmon are caught every year, carefully packed in tins, and shipped in small vessels, which form the salmon fleet, and sailing round Cape Horn, touch at different English ports. Salmon is canned in other countries, but that packed in British Columbia is in special demand. In order to protect the fish, hatcheries have been constructed, where the eggs of the sockeye salmon (the best for canning purposes) are hatched. When the fry, as the tiny fish are called, are about one and three-quarter inches long, they are turned

out into the stream. Then they swim down to the sea, where they remain till they are four years old, when they return to the rivers. On the way every effort is made to catch them, either in fish-traps in the Sound and the Straits of Fuca, or in nets on the Fraser and other rivers.

Sometimes thousands of fish are caught in one night in the fish-traps. A scow, as the boats are called, then comes alongside, the traps are 'lifted,' and the contents are emptied on board the scow. It is a strange sight to see three or four thousand of these large fish slipping about on the deck. The fish are then thrown on to the steam tug, which conveys the load to the cannery, where often within two hours it is cooked in a retort, packed in a can, soldered, and ready for testing. Fish are also caught with nets or lines in the rivers, and brought in small boats to adjacent canneries.

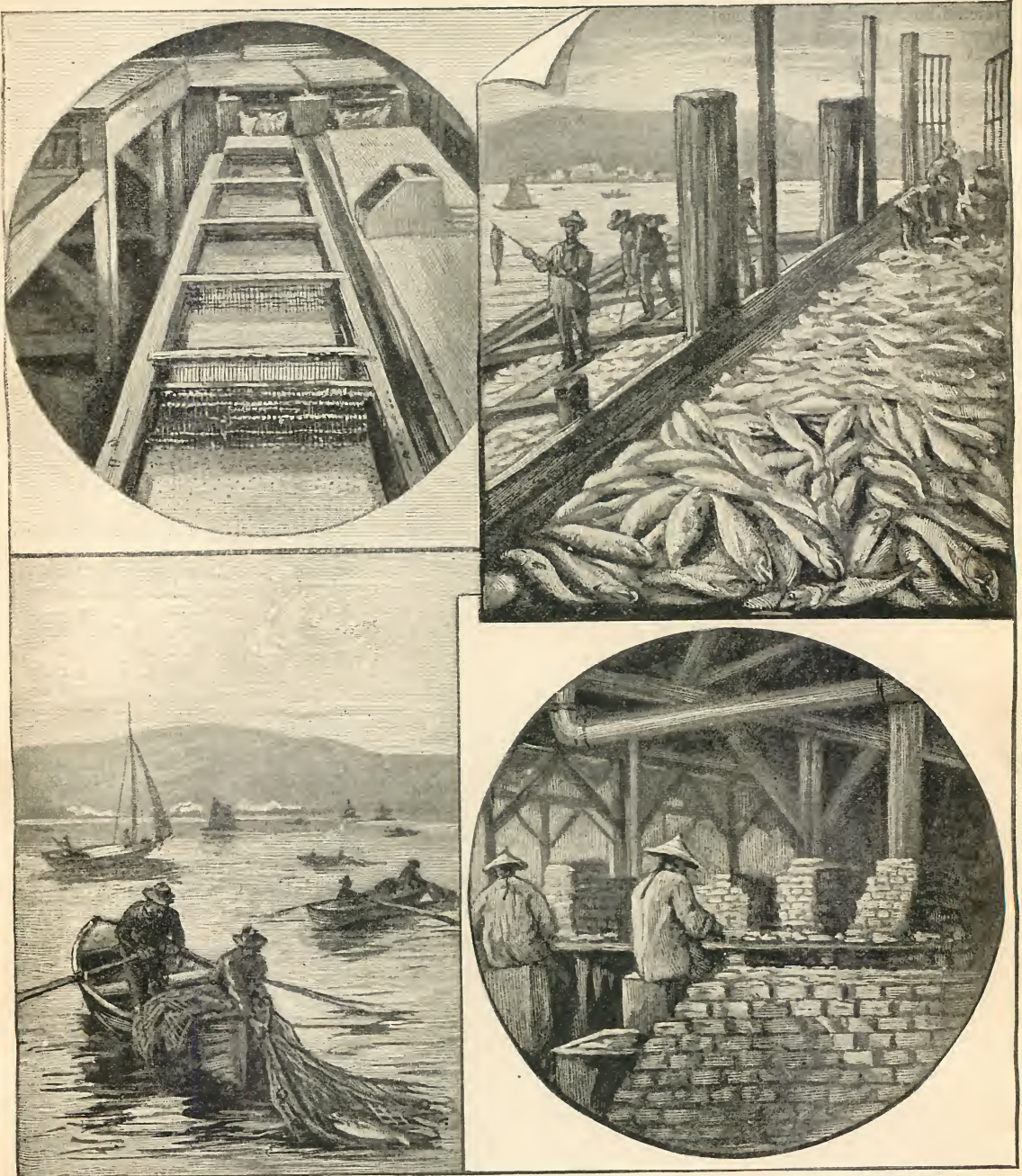
I must tell you next about a wonderful machine which is being introduced into all the large canneries. It is called 'the iron chink.' A strange name. What does it mean? Perhaps you know that in this part of Canada much of the labour is done by Chinamen, who are sometimes spoken of familiarly as 'chinks.' This machine does a great deal of the work that used to be done by Chinamen; in fact it is said to take the place of thirty workers, and therefore it is called 'the iron chink.'

It is a very ingenious contrivance. One part cuts off the heads and tails, another the gills, another cleans out the inside of the fish, and finally cuts it into suitable sizes for putting into the cans. The inventor is Mr. Smith, of Seattle.

His story of the invention is worth telling, for we may learn a useful lesson from it. Mr. Smith came to British Columbia some twenty-five years ago, having been apprenticed to a terra-cotta decorator, but no workmen of this trade were needed, so he took to a trade which would always be useful, that of a cook. As a cook he worked hard, and travelled about for twenty years. Having saved money, he invested one thousand six hundred pounds (eight thousand dollars) in a salmon-cannery and lost it. Now, instead of grumbling and bemoaning his misfortune, he set to work to bring success out of failure. He found that the cannery speculation had come to grief mainly owing to the high wages paid to the 'hands' employed and to the waste in canning fish. After eight months' hard thinking and experimenting, he brought out 'the iron chink,' which takes the place of men, and is acknowledged by all to be very successful.

Mr. Smith had no knowledge of machinery, but, by dint of perseverance, he produced a machine worked by electricity which can adjust itself to fish of different sizes, of which the knives are self-sharpening, and which can prepare in an hour three thousand six hundred fish for canning; not including, of course, the washing, which is done by Indian women in troughs. Next time you meet with failure or disappointment, do not be glum and cross, but try, like Mr. Smith, to bring victory out of failure.

The cannery building is of wood, because timber is cheap and good. All the work connected with canning salmon has to be very carefully done; otherwise there would be a danger of the fish becoming



Hatchery for Salmon-fry.
Salmon-fishing.

Unloading the Scows.
Canning the Salmon.

unfit for food. The greatest care is exercised in cleanliness and in testing the cans several times to make sure of their being perfectly sealed.

Next time you see or eat tinned salmon, remember

that it is the result of many men's work, all of whom are responsible for doing their own especial part properly; in this, as in every kind of work we undertake, *thoroughness* should be the watchword.



“The cat meant to come down.”

ROUND THE CAMP-FIRE.

II.—A CAT AND DOG STORY.

‘WHY is it,’ asked Bobby, who was this evening in a happy vein, owing to a highly successful shot during the day—a very long shot, which had

brought down a magnificent male specimen of the hartebeest—‘why is it that while in the veldt the feline species is held by us all in very great honour, and the canine family, as represented by the hyæna, the jackal, and so forth, in contempt and dislike, yet at home in England it is the cats who fail, as a

rule, to gain our respect, while the dog is honoured and esteemed by all?’

‘I should say the answer is obvious enough,’ laughed Vandelour. ‘The cat loses all the virtues in domesticity, and the dog develops them.’

‘I think you are wrong,’ said Bobby. ‘Oh, I know you are expressing the general view. The dog, in England, is considered a very fine fellow, and the cat a lazy, thieving thing of no merit. Now, I have come to the conclusion that the dog has made its reputation simply through bluff; he is a humbug, and has taken humanity in, while the cat is an honest creature, inclined, in fact, to give himself away by appearing worse than he is. For my part I prefer a cat, and I will tell you a story to justify my choice, if you like.’

I was staying at my brother’s, down in Hampshire, and my brother had a jolly little Dandie Dinmont dog, a little rascal who went about with a great air of importance, suspecting everybody and everything, and inquiring into all sorts of things with which he had no concern. No stranger could come up the drive without being barked at and bullied; errand-boys hated and feared him, and no wonder, for, trading on their belief that he was a fine, brave dog, Bounce would always worry them, and sometimes even snapped at their legs. For my part, I soon found Bounce out, and the dog knew that I had recognised him for the humbug he was, and did not like me. I often told Bounce he was a mere play-actor, and that at the first sign of resistance from any sort of creature—even a bluebottle—he would show the white feather. He understood this sort of thing quite well, for Bounce was clever enough. When shown up by me in this way, Bounce would growl, then whine, then leave the room in so depressed and miserable a mood that my brother Frank used to tell me it was a shame to speak to a high-spirited animal in that way—no wonder it hurt his feelings!

‘Look here, Frank,’ I used to reply, ‘if a mouse were to turn and shake his fist at that little humbug of yours, you would see him run like a hare. He has taken you in so completely that you see all his good points, such as they are, and suspect none of his bad ones.’

But no amount of argument persuaded him. However, the day of awakening did arrive, and I was there to see it. It came with the arrival of a magnificent Persian cat, which a friend sent to my sister-in-law, Kate—Frank’s wife—as a birthday present.

The cat came in a hamper, having travelled all day, and doubtless its nerves were a bit unstrung, for, when it was released and taken upon Kate’s knee to be fed and consoled, and so forth, and its ears suddenly heard violent barkings from Bounce, whom Frank had taken the precaution to hold in case of accident, poor Shah, the cat, bounced out of Kate’s arms, flew out of the open door, and disappeared into the next room. Meantime Bounce strained and struggled to get free and barked viciously. I always imagine that animals speak, each one after his own fashion, and I imagined Bounce crying out, ‘What’s this? Cats are vermin! Away with it!

Drive it out of the house—let me get at it! Either that thing or me!’

Frank soothed the dog. ‘It’s all right, Bounce,’ he said. ‘You and Shah are going to be great friends; you must be a good dog, and let it alone for master’s and missus’s sake!’

Later in the evening a little scene which I happened to witness threw a different light on matters. I entered the drawing-room at a moment when no other person was there. The cat, Shah, however, having had some food after his journey, found himself refreshed and rested, and now lay in dignity and leisure upon the sofa. I stroked the cat, and he responded by rubbing his head in a friendly manner against my hand. We were upon terms of friendship when in at the door ran Bounce, who, seeing the cat, rushed open-mouthed towards it.

‘Now, Shah,’ said I, ‘show your mettle; this is only bluff upon Bounce’s part; shake your whiskers at him, and he will fly for his life!’

Bounce, meanwhile, stood and barked by the sofa. He could easily, of course, have jumped upon it and engaged in a moment in deadly warfare with the cat, but he preferred to pretend that the sofa was rather too high for him. Suddenly Shah, who had gazed with indifference upon him as he stood and abused him from below, yawned, and raised himself into a sitting posture. Bounce barked on. Shah scratched his left ear slowly. ‘Do stop that noise!’ he seemed to say.

‘I will stop it when my teeth are in you,’ Bounce’s barks appeared to answer.

‘Oh, very well, then!’ said Shah. He yawned, shook himself, and showed signs of leaping to earth.

Scarcely had his intention become clear, however, when I saw Bounce prick up his ears just as he was accustomed to do when called by his master; he turned as though to listen, then trotted out of the room!

‘Shah,’ said I, ‘well played! You will be all right now. You needn’t be afraid of Bounce; I told you he was all bluff.’

Shah purred contentedly, and came and sat upon my knee. The meaning of his purring was as plain to me as though he had spoken his satisfaction in English.

On the following morning came the great surprise for Frank, my brother, with whom I sat and conversed in the smoking-room. A tremendous barking in the garden disturbed us in the midst of a long talk, and we both went to the window. There we saw and heard (or seemed to hear) as follows:—Shah was lying comfortably in the fork of a tree on the lawn. Bounce stood and barked beneath, running round and round the tree, and occasionally jumping up as though full of a great longing to reach Shah and eat him up.

‘Come down, you milk-lapper!’ I seemed to hear him say: ‘you mouse-bullier, come down and be eaten, or I will jump up and fetch you.’

‘Do be quiet, and let me sleep,’ murmured Shah, half opening his yellow eyes and blinking at Bounce.

‘Come down, I tell you, and be torn into fragments!’ shouted Bounce. ‘I will teach you to

come poaching around in other people's places! Who asked *you* to come here?' "

'Oh! for goodness' sake be quiet,' murmured the cat, 'or really I shall be obliged to come down.'

Bounce's barks redoubled. 'Come down!' he seemed to say. 'I only wish you would; cat is my favourite food, and a lazy, fat rascal like you would be delicious. Come along, I am waiting for you.'

'You know quite well,' said Shah, sitting up and stretching himself, 'that you are only showing off in order to impress your master, who is watching you from the study window. You have not taken in Mr. Robert Oakfield, who is also watching.'

'Poor old Bounce is very excited,' said my brother. 'That cat is bigger than he is, but he isn't a bit afraid of it; he doesn't know what fear is. Fetch him down, then, Bounce—s-s-s, cats!'

'I don't envy Bounce when the cat *does* come down,' said I.

'Oh, but the cat isn't such a fool as to come down,' Frank laughed. 'If he did, he might put in a scratch or two, but Bounce would get back his own, and a little more.'

'Shah,' I called out, 'jump down and teach him to keep a civil tongue.'

'Why, the cat is coming down!' exclaimed Frank. 'Here, Bounce, come in, you rascal. He must not kill that cat; my wife would never forgive him. Come in, Bounce.'

Bounce observed that the cat meant to come down. He licked his lips, and made as though the great desire of his life was about to come true. He looked about him anxiously, however, between his barks, as though seeking some refuge to which he might fly if necessary. His master's voice was a welcome relief. He turned round, with cocked ears and wagging tail, as though he said, 'Just half a minute, dear master, while I kill this cat here. I shan't be long.'

He turned away just long enough for Shah to jump lightly to earth and canter slowly across the lawn. Bounce turned back a second later, and resumed his barking, advancing round the tree. Suddenly he realised that Shah was no longer there; that is, for my brother's benefit, he pretended to realise it.

'What!' he barked. 'The cat gone, the rascal!'

At this moment he caught sight of Shah going at a slow trot across the lawn. He started in full cry after him, regardless of the shouts of his master. It really looked rather bad for the cat. Could I have made a mistake? Was Shah really frightened by the noisy dog?

But the end was not yet. Shah did not hurry. He allowed Bounce to come very close to him; then he suddenly faced him. 'Yes?' he seemed to ask. 'Well, what is it? Is that a smut on your nose?' A whisk of his front right paw; a shriek of pain from Bounce. Then in an instant the chase was reversed. Bounce raced yelping across the lawn, past the window, over the flower-beds, into the shrubbery. At his heels Shah galloped. In the shrubbery, out of sight of our eyes, a tragedy was enacted. Exactly what happened I cannot tell, but it is certain that the Feline triumphed over the

Canine race, and that Bounce returned home a saddened and bedraggled dog, ashamed to be seen, depressed—worst of all, Found Out!

Shah never boasted of his victory. He sat where he liked, as he had done before, and took no more notice of inferiors like Bounce than he had been accustomed to take aforesaid.

From that day onward my brother Frank respected Shah, the cat. His affection for Bounce remained, indeed, but the nature of his love was, perhaps, changed. Admiration disappeared, and pity took its place. It *was* a pitiful sight to see poor Bounce lower his tail and leave the room whenever the Superior Animal entered it.

SEEING FOR HIMSELF.

IN the days when sailors were forced into the navy by means of the press-gangs, much unnecessary cruelty and hardship were often inflicted upon the unfortunate men whose lot it was to be caught. Some officers who commanded the press-gangs were worse than others, and when the demand for men was very great, these officers sometimes exceeded their orders. It was not always easy to bring them before their superiors, for few people saw their injustices except those who were too much afraid to make a complaint.

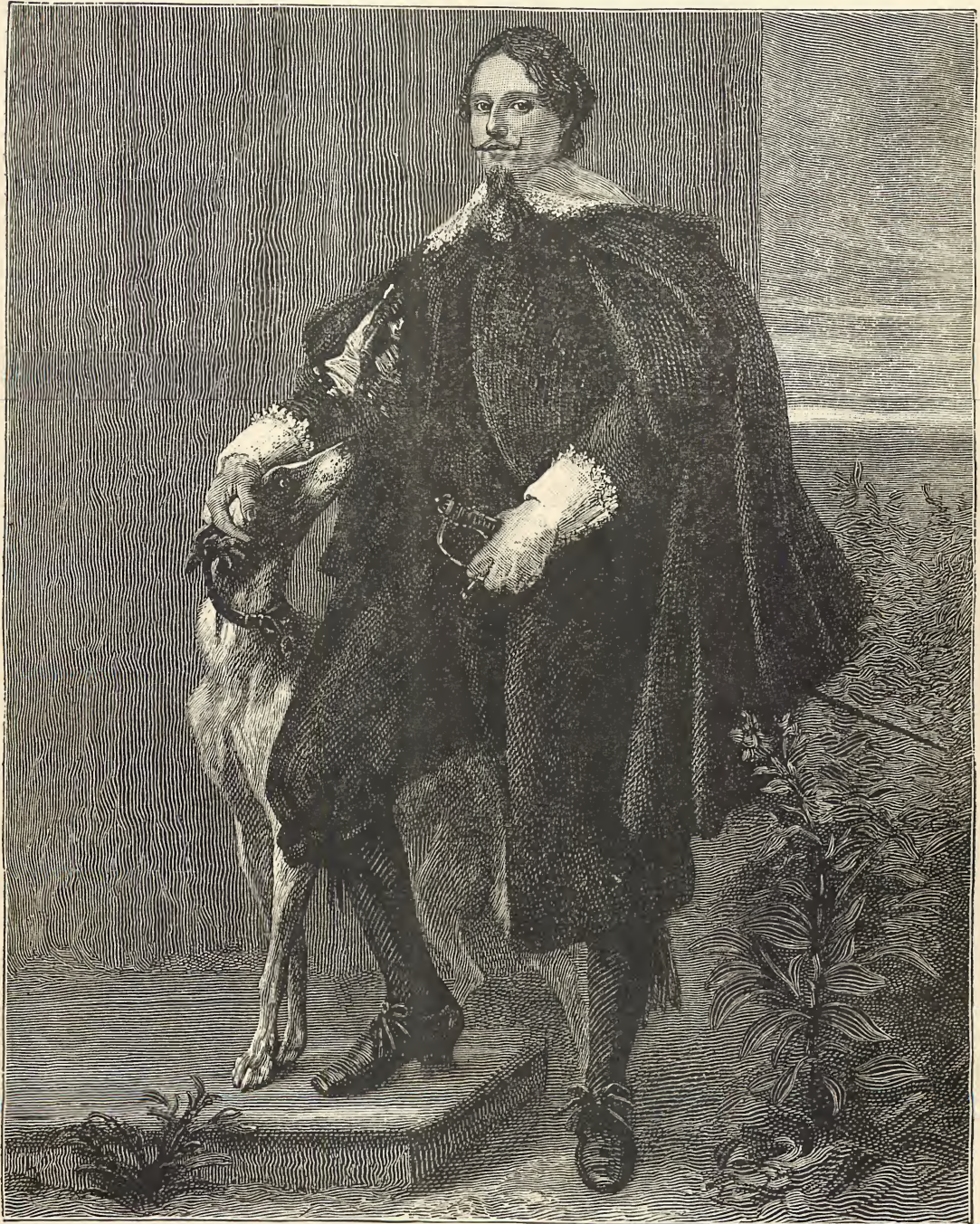
It happened at one period that there were many vague rumours that the press-gangs were pushing on their work with more than usual severity. The Duke of Cumberland, who was an officer in the Army, heard these rumours, and wondered what truth there was in them. He resolved to find out for himself.

Taking a brother-officer into his confidence, they put on ordinary sailors' coats over their usual clothes, and went to Wapping. They entered an inn, and asked the landlady to show them to a private room, as they were much afraid of the press-gang. But, although the landlady took the money which they offered her, she treacherously sent for the press-gang, as the Duke thought she would, and in a very short time the two soldiers were seized, and hurried on board the tender to join the other seamen, who had been already impressed.

As it was the Duke's object to ascertain the cruelties of the press-gang, he pretended a certain amount of unruliness, and thus enraged the officer in command. The latter grew at length so angry that he ordered the two men to be stripped and flogged. But no sooner had the seamen under his command pulled off the Duke's blue sailor coat, than they discovered the star upon his military coat. The captain of the tender saw at once that he had made a mistake, and begged hard to be forgiven. But the Duke was now more than ever determined to see for himself how the captured sailors were treated on board the tender, and he ordered the captain to be arrested, while he himself went below. There he saw enough to convince him that there was great need of reform in the working of the press-gangs, and he went to the Admiralty, and acquainted them with what he had seen. The result was that many of the abuses were reformed for a time.



“The captain saw that he had made a mistake.”



“Philippe le Roi,” by Van Dyck.

PICTURES AND THEIR PAINTERS.

From the Wallace Collection, London.

V.—VAN DYCK.

ONCE more we have to do with a painter from the Netherlands, but his life-story is a very different one from that of Rembrandt. Sir Anthony Van Dyck, court-painter to his Majesty of England, is a very fine gentleman indeed, and will take us into fine company; and though his brilliant, busy life ended before he was forty-three, he put more work into the years than most men would have done in twice the time; and he was a favourite to the end, sought after and praised, with no sad twilight of poverty and loss of popularity such as marked the later years of his great countryman, Rembrandt.

Van Dyck's birthplace was Antwerp, the splendid city of palaces, so that his first years were spent among such treasures of art and architecture as would be in themselves an education to a beauty-loving child. He was one of a large family party of twelve children, his father being a well-to-do tradesman. His mother is said to have been famous for her beautiful art-needlework, so, perhaps, her little son learnt some of his first lessons in colour and design while he watched her busy fingers. He must have shown his talent at an early age, for we find him at ten years old apprenticed to a painter, beginning his life-work at a time when most boys would be thinking of little but their games. Such good use did he make of his time that at nineteen he was a master in one of the painters' guilds, and three years before that he had pupils of his own. A little later we find him not only studying under the great Rubens, but allowed to help him in carrying out an important order for the decoration of one of the Antwerp churches. The master seems to have been a good friend to his promising pupil, helping him by advice and introductions, and getting him commissions from his own patrons.

Van Dyck must have been about one-and-twenty when he first visited England, the country which was to be his second home. He was evidently well received, and we hear of one hundred pounds being paid him by the reigning king, James I., for some work done for him. A year or so later Van Dyck lost his father, and the event is marked by the famous painting of the Crucifixion in the Antwerp Museum, which the son dedicated to his memory. Soon we find him on his travels again, this time to the goal of every painter, to study in their own Italian sunshine the work of the great Venetian masters whose colouring had helped to inspire his own. In Rome, Florence, and Venice we hear of him, but his longest stay was probably in Genoa, a city of palaces like his own home. Apparently he was not very popular with the merry brotherhood of wandering artists, who congregated in the Italian cities, and 'starved, feasted, despaired,' according to the state of their purses, living from hand to mouth in the fashion of Frans Hals and his boon companions. Van Dyck's taste was for the Court; his sitters were the great princes, the fair ladies of the wealthy city of the sea. One is really sometimes inclined to wonder whether all his models were such stately and gracious lords and ladies, or whether he glorified them a little in

the light of his own imagination. As he grew more busy and more popular, it is said that he employed his pupils to paint the costumes of his sitters, and that he copied all the hands from one beautiful model: a sad insult to the fingers, which often express so much of the character.

But among his many sitters there is one who will ever be chiefly associated with the name of Van Dyck, our own ill-fated monarch, King Charles I., to whom, in the year 1632, he became court-painter. It is owing to the great master that every child is familiar with the sad, beautiful face, the long brown locks, and the eyes so full of mournful foreboding, as if, even in the days of peace and prosperity, they looked on to the sorrows to come. There is no such shadow on the fair face of the queen, Henrietta Maria, with the pearls round her slender neck and the little soft curls on her brow. As she sat to Van Dyck in the days of her youth and beauty, arrayed in shimmering satin and cobwebby lace, she little thought of the future exile and poverty, and of the cold lodging in Paris, where her little daughter would lie in bed through the winter day, because there was no fuel to kindle a fire.

Van Dyck did not live to see the evil days come upon his royal patrons. He took a wife in the land of his adoption, the Lady Mary Ruthven, granddaughter of the Earl of Gowrie. His last years were spent between England and the Netherlands, and he worked to the end, though his health was breaking down and his commissions were often delayed through illness. A daughter was born to him in the year 1641, and but a few days later he died, at the house in Blackfriars which was his London home; and England laid with honour in old St. Paul's the bones of the great painter whom she had well-nigh come to regard as a son of her own. His portrait is given on page 204.

M. H. DEBENHAM.

AT LAST.

WHEN the wintry days are over,
And the storms are all gone by,
When the birds begin their singing,
And the blue is in the sky,
In the time of bud and blossom,
When the growing time is past,
Then the patient little seedling
Will become a flower at last.

When the hill where first it trickled
Is a long, long way behind,
And the grassy banks and meadows
Gone by which it needs must wind,
When it leaves the pleasant country
And its stream flows wide and vast,
Then the little winding brooklet
Runs into the sea at last.

When your childish days are over
And the games that once you played,
When your lessons all are ended
And your youth that never stayed,
Though the time now goes so slowly—
So you think—yet it goes fast—
Little one, now so impatient,
You will be a man at last.

SINCERE.

ONE of the greatest virtues is sincerity. Some of you, perhaps, are not aware what an interesting origin the word 'sincere' had. In olden times, when Greece and Rome were distinguished by their fine sculptures and beautiful carvings in wood, marble, and stone, should there have been a crack, or piece of the material broken off, it was filled up with hard wax (*cera*) coloured and finished so that even an expert might not be able to find out the blemish. Any piece of work absolutely whole was pronounced by the seller as 'without wax' (*sine cera*). Thus originated the word 'sin-cere,' and truly it is good that we ourselves and all we do should be what it appears, and 'without wax.'

APPEARANCES.

I CANNOT think how the gardener allowed such a thing to be planted in *our* orchard!

It was an aristocratic Duchess Pear that spoke, and all the sourness of her heavy crop of unripe fruit (for she was proud of giving her guardians some trouble over her late, indoor ripening) seemed compressed into that one short sentence.

'So near us, too,' murmured a complaining voice. The Victoria Plum was trained on the same wall as the Pear. 'The branches positively shade my fruit already. I really must admit—but don't say I said so, you know—that our friend, the gardener, might have found a more suitable place for it.'

'Where would that be, pray?' snapped the Pear. 'On the rubbish-heap, I should imagine.'

'Don't speak so loudly,' whispered the Plum, who was of a softer disposition than her neighbour; 'he might hear, and I don't like to seem rude.'

'I don't care,' retorted the other, 'it is time the creature knew what we think of him; for my part, I should be glad if he died of shame to-morrow. A disgrace to the orchard!'

'Really,' exclaimed a voice overhead, 'how can *you* possibly know what graces and what disgraces the orchard? If it amuses the gardener to plant a tree with wooden fruit, let him do so by all means; no one need to be so silly as to try to eat it. But I have always found that you wall-fruit, nailed down to the most limited views of life, are so ready with your opinions. Now, for myself, and the big Apple-tree waved its long arms majestically, 'having such great opportunities for observation, I have some reason to form decided views.'

Meanwhile, the cause of all this excitement, a young Nut-tree, was trembling in every leaf with shame and unhappiness. Far from being angry at the Pear's ill-natured remarks, he would have been only too happy to follow the suggestion, and weep out his little life on the rubbish-heap. But that, of course, was impossible, and perhaps, after all, deep enough not to be quite killed by discouragement, was the feeling that he had been put there for a good purpose, and the sturdy resolve to abide by it, come *weal* or woe, till time should show the end. But, if bitter remarks could have blighted his life, he would surely not have troubled the orchard long.

Certainly the other trees had some show of reason

on their side, for their soft, juicy, luscious fruit was so utterly different from the hard little nuts hanging from the branches of the despised neighbour, that perhaps it was difficult to realise that all might be good in their different ways. But the trees refused to think of this, though it is true that, as the earlier kinds of fruit grew riper, something of the bitterness of the remarks was lost; still, the Peach, who occupied a favoured corner of the sunny south wall, could not refrain from occasional comparisons of her own warmly blushing cheeks with the hard russet ones of the Nut-tree. But, then, she was always of a slightly acid nature, and she was careful to conceal the fact that beneath that soft outside she carried a large, woody stone, not entirely unlike the nuts she was so ready to scoff at.

But the Pear was the worst of all. 'Do tell me why you take the trouble to grow those funny little knobs, my good friend. I am sure it would interest us all so much to hear. Pray don't be bashful; I assure you quite silly things amuse us these dull autumn days.'

If a nut could blush like other fruit, surely the little tree would have done so a hundred times; instead, he stammered out a modest remark about people's tastes differing.

'Tastes, did you say?' said the Duchess. 'You surprise me. I never knew before that wood had any taste at all!'

Even the wasps, that circled greedily round the ripening plums and apples, added the sting of their remarks to the general chorus; and so far were the silly orchard-dwellers led away by flattery, that although numbers were spoiled by the wasps' attack, they all regarded it rather as a compliment, and another proof of the uselessness of the nuts. But, at last, one day as the autumn sun was breaking through the early mist, the morning stillness of the orchard was rudely disturbed by the merry shouts of boys, rushing here and there over the grass. Finally, by common consent, they bore down upon one particular tree, and, in answer to a few vigorous shakes and thumps, a shower of nuts fell from its branches; and each time there was a scramble among the children for possession.

'Look! look!' cried the other trees, triumphantly. 'Were we not perfectly right? Even the wise humans know that such a crop is only fit to be crushed beneath their heels.'

But here the self-satisfied remarks stopped abruptly; for the boys were eagerly picking up the cracked nutshells from the path, and filling both mouths and pockets with the kernels, clearly to their entire satisfaction; for remarks such as 'Jolly good,' 'Ripping,' 'Hope Father will plant us some more,' fell from their lips from time to time.

Presently the merry voices died away into the distance, and the orchard was once more wrapped in silence; for, when the little visitors had gone, the trees were far too subdued, not to say ashamed, to speak at all for a long while. But it was to be noticed that, from that time, hasty, uncharitable judgments, and unwillingness to see good in anything different from themselves and beyond their powers of understanding, troubled the peace of the orchard far less; and in time even the Pear became less hard-hearted.

INSTEAD OF THE SUN.

VI.—MATCHES.



HUNDRED years ago, matches made of splinters of wood, tipped with brimstone or sulphur, were used with the flint and steel. Such matches were known in England five hundred years ago, and long before that the Romans had made them. But, if you will think the matter over, you will see that these matches were only little torches, which could be readily lighted at the glowing tinder and carried to a lamp

or candle. They did not *make* the light. It was the shock of the flint and the steel which brought forth the fire, and without these the brimstone matches were of no use, for they could not be lighted by being merely rubbed or struck.

We see, then, that the matches which we use to-day are very different from those old brimstone matches, since they are all lighted by friction. When we strike one of them, we are really obtaining a light by rubbing two things together, very much as the savage lights his fire by rubbing one stick against another. But while it takes the savage five minutes or more, at least, to get a light, our match is struck in a second, and it is much more convenient and certain than the savage's sticks. We owe this result to our knowledge of chemistry, which has enabled us to select the fittest materials for our purpose, and so to combine them that out of their many different properties we may obtain just that effect which we want.

I have already mentioned that phosphorus is a substance which takes fire readily. The heat of one's hand is sufficient to make it burn. Here, then, is a substance which will take fire readily enough, but it is far too dangerous to use except in small quantities. If, however, the phosphorus were used alone in very small particles, it would hardly give out sufficient flame to light the wood of a match. It would be burnt up in an instant, and would give a flash and a good deal of smoke rather than a clear and steady flame. But, when describing the lime-light, I showed how the hydrogen flame was improved by supplying it with oxygen. The flame of burning phosphorus can be improved in a similar way. Chemists are acquainted with several substances which contain a good deal of oxygen, but which part with it when burned. One of these is chlorate of potash, and another is saltpetre. If a little of either of these substances is placed near a piece of burning phosphorus, it joins in the fire and delivers up its oxygen, and the phosphorus burns much more powerfully.

Now let us see how matches are made. The all-important part of a match is the little piece of red or blue or brown composition on the tip of the wood. It is made of phosphorus and chlorate of potash, or saltpetre, mixed with gum or glue to form a sticky

paste. A little colouring matter is also added to the paste. The wooden splints are cut by machines, one of which will make several millions a day. A number of these are set in a frame and dipped into melted paraffin. They are then dipped into the phosphorus paste so that each takes a little of the mixture on its tip. When the paste dries, the matches are ready for packing into the boxes in which they are sold.

It is a well-known fact that friction produces heat. When we rub a match upon a piece of sand-paper, a wall, or anything else which is hard and rough, we produce sufficient heat to set the little particles of phosphorus at the tip of the match on fire. As the phosphorus burns, it forces the chlorate of potash to give up its oxygen, which helps the flame. By this means sufficient heat is obtained to set the wood of the match on fire, the wood burning all the more readily because it has been dipped in paraffin. And thus we obtain a light by friction in a second or two whenever we need one. It should further be noticed how little trouble the matches give us. They are small and convenient to carry; they are clean and dry; the colour of the tip tells us at once what they are, and warns us to be careful how we use them, and, if we do use ordinary care, they are quite safe.

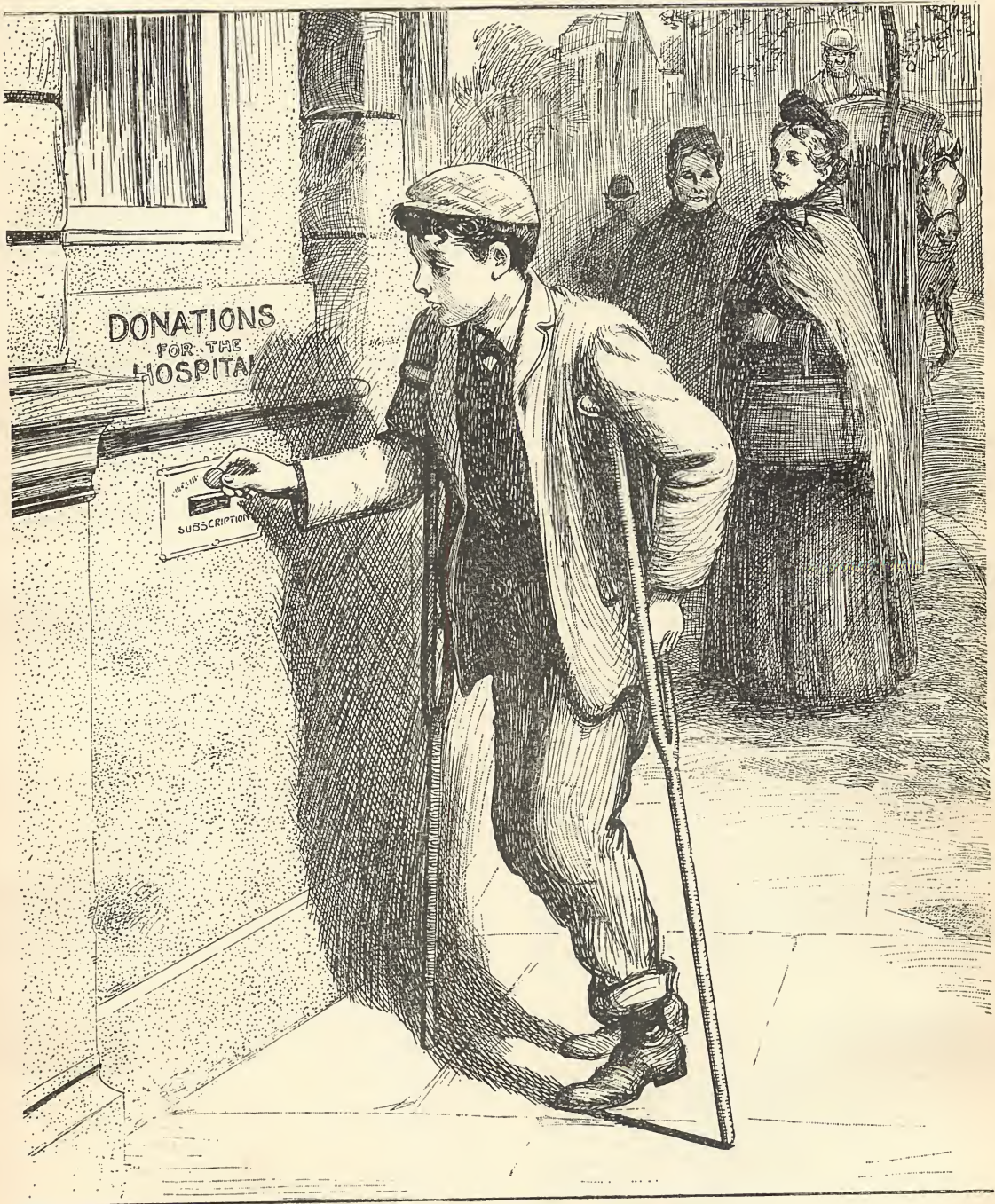
Many men have devoted much study and much labour to the making of matches in order to give them all these little improvements, and scores of different kinds have been made. When so many contributed something towards the common end, it seems scarcely fair to single one out for praise. Still, we like to know to whom we owe our gratitude for useful inventions. It is said that the first man who used phosphorus for matches in England was John Walker, of Stockton-on-Tees, about the year 1833. But you will not forget that many others also deserve credit. It is not possible for every one to be a great and successful inventor, honoured by every one; but it is possible for each to do something towards the attainment of some worthy object, and such labour is never lost.



PICTURES AND THEIR PAINTERS.

SIR ANTHONY VAN DYCK.

(See page 202.)



"He slipped the coin into the opening for donations."

WAS IT WORTH WHILE?

SIR CHARLES DENVERS was away from England at the time, or it is pretty certain

that Harold Staunton's plucky act would have met with speedier reward.

He was walking along the seashore one day, on his way home from school, when he saw, amongst

the cliffs, a lad of about his own age attempting what Harold considered a very dangerous feat; and Harold was a good climber, and no coward either.

'I wouldn't try and climb the Giant's Cliff, if I were you!' he shouted; 'the rocks are crumbly up above, and you might come a cropper!'

The boy thus addressed, Charlie Denvers by name, a pupil at a school in the neighbourhood, gave a scornful laugh.

'Pooh! What do you know of climbing?' he retorted. 'Hold your tongue and mind your own business. I can take care of myself right enough!'

But could he? That was the question. Harold held his tongue as he was bidden, but, nevertheless, he watched the daring young climber with breathless interest.

Higher and higher mounted the lad, each step bringing him nearer the summit of his desire. But, alas! when he stood within about ten feet of the top of the cliff, a sudden and terrible giddiness seized him—a giddiness which, as he knew, threatened disaster and probably death. Harold, seeing his hesitation, realised in a moment what had happened; and he realised something else as well—that a fellow-creature, in dire peril, was dependent on him for aid. With scarcely a thought for his own personal safety, he began at once to take the upward climb, with the endeavour to lend a hand to the terrified boy. Before long he stood close beside him.

'It's all right,' said he, in a quiet, reassuring voice. 'Don't be frightened. There's a small ledge close by, which leads to a downward path. If you give me your hand I'll help you. Don't look down, that's all!'

Charlie Denvers was at first almost too dazed to move, but, presently gaining courage, he followed out Harold's directions, and, step by step, he was led from his perilous position to the flat portion of rock close at hand.

Then it was that the accident took place. Harold, in his anxiety to place his comrade's feet on a sure foundation, had not taken enough heed to his own. He suddenly slipped—made a desperate effort to save himself, but in vain. Down he fell a distance of some twenty-five or thirty feet, alighting with terrible force on another rocky ledge below. Denvers, aghast at what had taken place, rushed down the cliff-path to a fisherman's cottage near by, and kindly hands soon bore the unconscious boy home to his widowed mother.

Weeks of suffering followed, for Harold had not only broken one of his legs, but he was sadly bruised from head to foot. Denvers was only able to see his brave rescuer once after the accident took place, for the summer holidays began on the very day which followed the adventure on the cliffs. When he next returned to school it was to discover that Harold Staunton and his mother had removed to London, and no one, alas! could give him their address. In the meantime, Charlie's uncle, who acted as his guardian during his father's absence, had sent a sum of money to the widow, to compensate her for her son's injuries; but what could compensate Harold for the loss of the buoyant health and strength which had once been his portion?

'Was it worth while?' This was the question Harold asked himself one morning, when (after weeks of tedious convalescence) he was making his way, on his crutches, to the — Hospital, where he was now an out-patient. 'Was the game worth the candle, to save a fellow-creature's life, and to be crippled, perhaps, for the rest of his days as the consequence?' 'Yes,' came the answer from his brave young heart, 'it was worth while, although it's hard luck all the same.'

It was at this moment of his meditations that he chanced to pick up a purse, which a woman had dropped from her hand whilst walking along the street. As soon as possible he restored it to its rightful owner, receiving at the same time a shilling for his honesty. At first he was tempted to spend the money upon himself, but his better nature prevailed. He had often longed to show his gratitude in some form to the hospital where he had experienced so much kindness, but his mother's income was far too small to admit of it.

Now was his opportunity of giving something, and Harold, without waiting for a change of mind, stepped along on his crutches and slipped the coin into the opening for donations in the hospital wall. He looked a pathetic figure as he stood there, the warm autumn sunlight seeming to increase the pallor of his face.

The woman whose purse he had restored was watching him meanwhile. 'That's a good, unselfish lad,' said she to herself. 'I wonder what made him so ready to part with his shilling? I've a very good mind to find out.' And, curiosity being one of Maria Brown's characteristics, she was very soon in possession of Harold's entire history.

'Do you mean to tell me, boy,' said she, excitedly, 'your name is Harold Staunton, and that you come from Seabright?'

'Yes,' answered the lad, simply.

'Well, I never!' she said. 'My master, Sir Charles Denvers, has been looking for you everywhere! It strikes me, young man,' she went on, 'your troubles are over; for if there's a cure for that crippled leg of yours, the master will find it out.'

As it proved, Maria Brown was right. Before long Sir Charles Denvers was a visitor at Mrs. Staunton's humble lodgings, and so great was his gratitude for Harold's rescue of his son that he was ready to shower blessings upon both the boy and his mother.

It was astonishing the effect that a few weeks of good nourishing food, combined with the best surgical skill, had upon Harold's crippled frame. In a comparatively short space of time the only visible result of the lad's accident was a slight limp, which was lessening day by day.

Sir Charles Denvers, and his son also, proved the truest of friends to the lad, and Harold soon had every reason to know that his brave deed (which he had done without any thought of reward) had been indeed 'worth while.'

And so rolled away the clouds from Harold's young life, giving place to days of hope and sunshine—an era which the boy ever afterwards dated from the time when he gave his humble shilling as a donation to the hospital.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 195.)

TEDDY put the glasses down. 'You're rowing for your life,' said he, over his shoulder, to Marley, as he took his oar; 'for Diego must surely know we were stowed away in Lockhead's cabin when he was talking in the saloon last night. He knows I understand Spanish, and if they don't succeed in getting rid of us, we shall be the evidence that will get them punished, if they are ever caught.'

'Pull!' said Marley.

The quarter-boat being lighter and less heavily loaded was ahead of the whale-boat, and both were approaching fast, and the dinghy shot away from the floating body of the great decapod none too soon. Teddy had to do the steering; he was keeping the boat's head as well as he could for a little speck of a town situated in a gorge of the cliffs. There would be a landing-place there, he was sure. As for Marley, he had nothing to do but take Teddy's orders, row, and watch the oncoming boats.

'We shall never do it,' said Marley, with a sudden look round.

'Don't talk,' said Teddy, 'and don't spurt till I give the order.'

It was when the dinghy was a few hundred yards from the beach, and the pursuing boats a cable-length or so from the dinghy, that the excitement attained its height. A number of people had come down to the beach—natives, mostly women—and were gazing at the sight before them without in the least comprehending it.

The quarter-boat was well in advance of the whaler, and Diego, in its stern, was urging on the men. He held a Mauser pistol in his hand, but he dared not use it, for fear of hitting the people on the beach. Besides, it was only a matter of a few more minutes, and O'Brien and his companion would be at his mercy.

The bow of the quarter-boat was within a couple of yards of the dinghy's stern, when O'Brien yelled to Marley to spurt for all he was worth. Then, crash! the dinghy took the beach, and twenty seconds later the nose of the quarter-boat was buried in the sand. Diego sprang into the water, which was nearly to his waist, but the two boys had got the start. They had tumbled over the bow of the dinghy, and were running for their lives up the crooked street of the little seaside town. It was a town of small houses, not much bigger than fishermen's huts; and when Teddy and his companion had turned the corner of the angular street they found the portion of street before them deserted, for the whole population had been drawn to the water's edge by three things—the ship; the decapod, floating on the water like a great balloon come to grief; and the boat-race, or, to speak more correctly, the boat-chase. Yet the street was not quite deserted, for, in front of one of the cottage doors, was seated a cripple girl mending a net.

She looked up as she saw the boys coming, and Teddy, with the instinct of a hunted animal, ran to her, well knowing that there was no help to be expected from the people on the beach, who had in

fact begun to join Alvarez's men in the pursuit without knowing why. 'Quick!' he cried in Spanish; 'hide us somewhere. We are being chased by bad men and they will catch us!'

The cripple girl stared at the boys at first in a frightened manner; then all at once came the sound of the pursuit, and she seemed to understand the situation.

She threw down her net, rose, and beckoned them to follow her into the little cottage.

The room they entered had a clay floor and was very barely furnished; a table, a settle, a few stools, and a huge chest constituted all the movables.

The girl threw up the lid of the chest.

'In you go, Dick!' said O'Brien, pushing his companion in first and then following him.

There were some fishing-nets in the chest, but, squeezing together, they found they had just room when the lid was shut down, as it promptly was by the girl.

Fortunately the chest was old and cracked at the sides, so that they had air enough to breathe. All the same, they experienced a horrible sensation of suffocation and a feeling of being in a trap, which was almost worse.

Then they heard shouts from outside, and the voice, evidently of the cripple girl, answering questions.

'She's a brick,' murmured Teddy. 'She's telling them we seemed to be making for the mountains.'

The pursuing crowd evidently believed her, for the voices died away. Then the lid of the chest was raised, and their deliverer beckoned them hastily out.

'You must go,' said she to O'Brien. 'By the back door you can get into the woods, and so to the hills. My father may return at any moment. Should he find you here I should be beaten, and you—you would be given up to your enemies. See! I will give you some milk and some bread. It is not much, but it's given with a good heart.'

She spoke in Spanish, and as she spoke she fetched a jug of milk from a shelf near the door, and two huge, round, flat cakes, like bannocks.

They drank the milk, and O'Brien thanked her; but he did not offer payment; such a thing he felt would be taken as an insult, though the place was poor enough in all conscience, and their benefactor almost in rags.

Then she opened the back door which gave on to a small yard, where a few hens were pecking about. Beyond the yard, and forming a natural wall to it, was the foot of a great mountain covered with trees and dense undergrowth.

In a moment they were amongst the trees, and climbing as hard as they could.

'Don't drop the bread, Dick,' panted O'Brien. 'We shall not come across many bakers' shops where we're going. Isn't that girl a brick?'

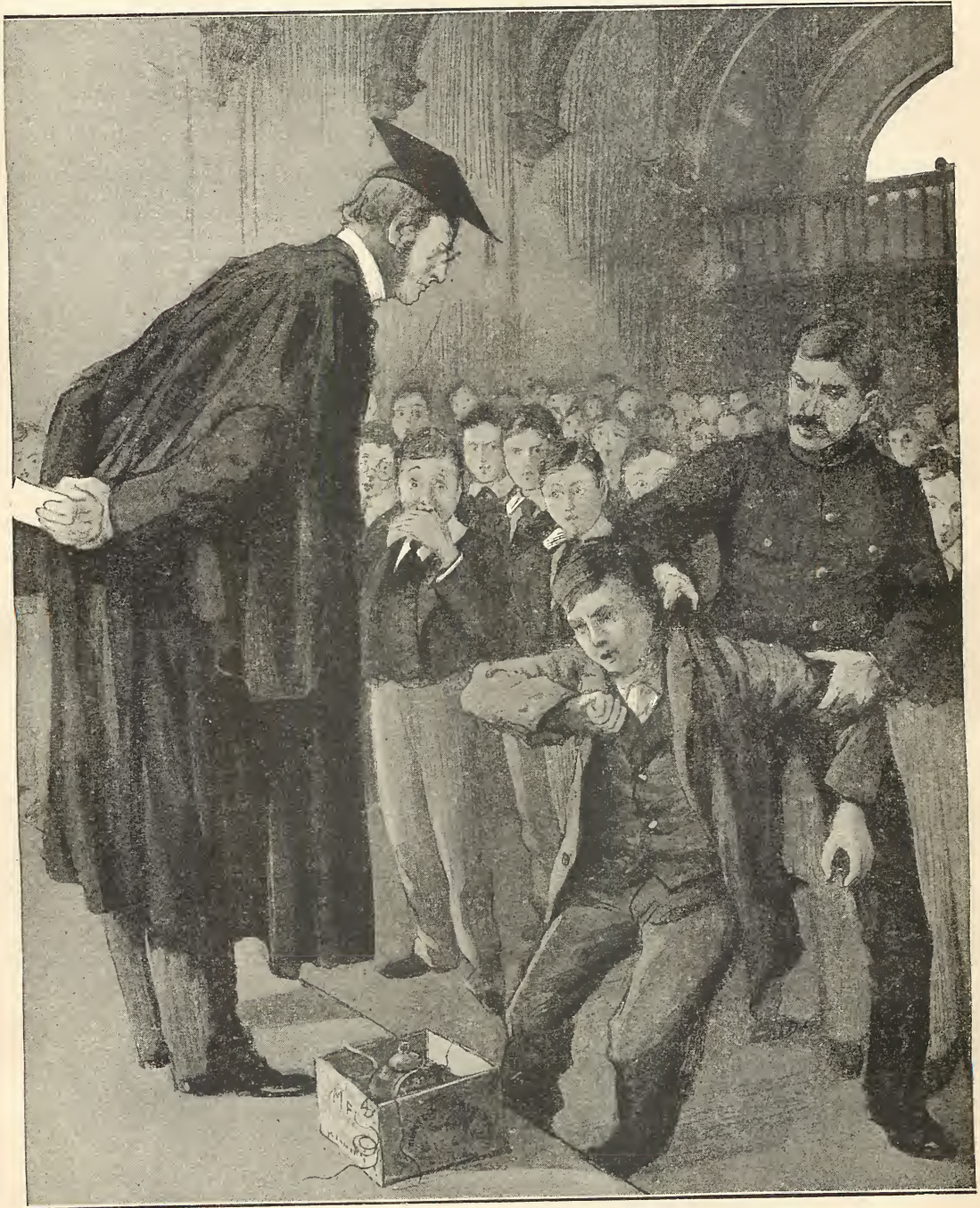
'Yes,' returned Marley; 'and if we ever get out of this, I will give her a present worth having.'

'So will I,' said Teddy. 'But steady on; it is no use tiring ourselves; we are not being pursued. Let's stop and take an observation.'

(Continued on page 215.)



"O'Brien yelled to Marley to spurt for all he was worth."



“‘What is the matter?’ asked the head master.”

IN SCHOOL AND OUT.

III.—DYNAMITE.

CANBURY Grammar School had been founded by Edward VI.; but no such large and loyal crowd ever assembled to cheer the boy monarch as had gathered along the railings of the playground one summer's afternoon to greet King Edward VII., who was to motor through the little country town. A hundred and fifty boys, large and small, in black and scarlet caps, were clinging to the railings, chatting at the top of their voices, for it was still half an hour before the motor could come into sight at the far end of the long, dusty road which led into the town; but the chattering came to a sudden end when Mr. Davidson's voice was heard behind them commanding silence.

He waited a minute before he began to speak, gazing with satisfaction at the waving flags and cheerful faces, and that minute gave Anderson Major time to hear a curious buzzing in the grass at his feet. He looked down to see what insect was making it, and could see nothing but a biscuit tin apparently fastened to the bottom of the palings. Then, realising suddenly that it was from this tin that the noise came, he broke the silence in the voice that had often been heard from one end of the playing-fields to the other.

'Dynamite!' he shouted. 'Into the lower school playground every one of you!'

Boys and masters alike scattered like a crowd of frightened sheep, and Anderson, having cut the string which fastened the noisy tin to the palings, picked it up and made his way across the playground as calmly as if he were carrying a football. Fifty yards away from the palings he was met by Mr. Davidson, who, with marvellous speed, had procured a large bucket of water, and into this the packet was slipped as gently as if it had been made of something even more breakable than egg-shell.

Then the head master, waving every one to a distance, lifted the dangerous object, and having carried it to the very farthest corner of the kitchen garden, placed it in a deep ditch.

'It can't do any harm there if it does explode,' he said with a sigh of relief, and it was with a paler face than usual that he returned to the playground, and ordered the boys who were peeping with scared faces through the lower school gateway to reassemble at the railings.

Ten minutes later, as the King motored slowly past, with many a smile and nod to the cheerful-faced boys who greeted him so lustily, he little guessed that one of them had faced sudden death on his behalf such a short time before. When the motor had passed, the boys went in to work, for the head master did not believe in unnecessary half-holidays, and Mr. Davidson, accompanied by a policeman and a retired official from Scotland Yard who lived near the school, went down to examine the mysterious object in the ditch.

'I expect it's only a hoax, sir,' said the Scotland Yard man. 'We don't get much of the real thing in England now-a-days; our king isn't like any of those foreign royalties who daren't drive about without a troop of soldiers.'

'It may be only a hoax,' answered Mr. Davidson, sharply, 'but it's better to take too many precautions about a hoax than not to take enough with dynamite.' His nerves were a little upset.

'Oh, certainly, sir, certainly,' agreed the inspector. He had investigated many frauds during his years of service in London, but he had also had to deal with real dynamite, and he knew how to handle it with safety.

'Yes, it's just as I thought, sir,' he said, when he had opened the mysterious but now silent tin and examined its contents. These consisted of a piece of brick, an old alarm clock, and a postcard on which was inscribed in large capital letters, 'Sold again, Bony!'

In talking of Mr. Davidson, the inspector was ever afterwards in the habit of describing him as a 'peppery gentleman,' but it was not often that the head master presented such a wrathful face as he did at that moment. That one of his own boys should have dared to play such a trick on him, and at such a moment, made him feel more fiercely angry than he ever remembered to have felt in his life before. He marched straight into the school hall, carrying the obnoxious package, and ordered Anderson to ring the school bell. In a few minutes the hall was filled with astonished boys, wondering what the summons meant.

'Boys!' began Mr. Davidson, in a voice of thunder, 'I want to know which of you has behaved in this wicked and dastardly manner! On a day when you should have been animated entirely by feelings of loyalty, one of you has dared to play a vulgar practical joke on your head master.' He held up the postcard, so that all the boys could read the inscription upon it. 'The boy who did it has disgraced—utterly disgraced the school, and there will be no more half-holidays this term until he has confessed.'

Dead silence reigned in the ancient oak-panelled hall. The boys gazed at each other and at the tin blankly, but on no face could Mr. Davidson detect any sign of guilt. Even the mischievous boys of the school looked as innocent and astonished as the rest. But still the head master waited. Surely the culprit's conscience would not allow a hundred and fifty boys to be punished on his behalf?

And while he waited the silence was suddenly broken—not by a confession of guilt, but by the voice of the school porter, accompanied by a scraping sound, as if he were dragging a heavy body along the passage which led into the hall.

'Now, come along, will you?' he was saying. 'I said that I'd take you to Mr. Davidson, and take you I will; so you needn't kick my legs like that.'

'What is the matter, Jackson?' asked the head master, as the porter at last appeared at the door, dragging behind him a snub-nosed, freckle-faced youth—no less a person than Bill Carter, the leader of the town boys.

'I saw this boy, sir, early this morning, carrying something into the playground, and I just caught him as he was going out again. Then, seeing you had told me to bring any trespassers to you, I shut him up in the coalhole until it was convenient for you to speak to him. You were so busy with flags, sir, that I did not like to disturb you before.' And

the porter, who was a privileged person, gave a decided wink. 'So he hasn't had any dinner, and he hasn't seen the King; and now I hope, sir, you will give him a good thrashing.' The porter looked and felt vindictive, for some of the town boys made his life a burden to him.

But the head master's face had begun to look a little less stormy. 'Is this what you brought into the playground?' he asked, holding up the tin.

'I'll tell you, if you make him let go of my collar,' said Bill Carter, sulkily.

'He shall let you go as soon as you have answered.' 'Well, then, it is!' said the boy.

'He may go, Jackson,' said Mr. Davidson, whose face had cleared as if by magic, and Bill Carter made a bolt for the door, fearing lest the head master should repent of his unexpected act of mercy. But Mr. Davidson was so relieved and delighted to think that it was not one of his own boys who had played the trick on him that he felt more inclined to give Bill Carter a reward than a caning.

'But, boys,' said Mr. Davidson, when he had stopped the whisperings which had broken out in the hall, 'you must not imagine, because the whole thing was a hoax, that therefore Anderson did not do a very brave and plucky thing when he carried the tin away so promptly from a place where it threatened danger to the King himself. You have cheered him often enough on the playing-fields, but he has never deserved your cheers more than he has to-day, and I say, "Three cheers for Anderson Major!"'

PUZZLERS FOR WISE HEADS.

11.—CHARADE.

My first is a cardinal point.
My second is greater in quality, degree, amount, or number.
My third is solid.
My whole is an English county. C. J. B.

12.—THREE SQUARE WORDS.

- 1.—That which grows the farmer's hope—the food of the people: part of a hen.
Ready; come to fruition; fit to pick.
Quite accessible; free.
Shut up; hemmed in.
- 2.—A little friendly talk.
Very well and strong.
An exclamation of sadness.
A trial; putting to the proof.
- 3.—A vain and idle boast.
A little mountain stream.
A plant which seldom flowers.
Simple, childlike gaiety. C. J. B.

[Answers on page 251.]

ANSWERS TO PUZZLES ON PAGE 179.

9.—Competition.

Pet.	Tin.	Motion.	Mite.	Cotton.
Comet.	Top.	Pen.	Mop.	Pine.
10.—1. Matthew Arnold.	4. Samuel Johnson.			
2. William Cowper.	5. Robert Browning.			
3. James Thomson.	6. George Borrow.			

THE PRINT OF THE WHITE MAN'S FOOT.

THE 'Print of the White Man's Foot' is the name the American Red Indian gives to the buttercup, for wherever the white man goes he takes it with him. There is nothing mysterious about this; it is simply that wherever the white man goes he takes fodder, and among his hay or his oats there are sure to be some buttercup seeds. Not, indeed, that any wise farmer would wish to carry buttercup seeds with him, for, beautiful as they are when they spread their golden carpet over our English meadows, those golden flowers are bitter and much disliked by cows, who will nibble all round a patch of buttercups, and leave only them standing erect.

At one time buttercups were supposed to be liked by cows and to make butter yellow, but farmers know better now, and scientific men have lately written about 'the worthless and objectionable buttercup,' and discussed means of suppressing it altogether. But people who are not farmers would sadly miss the golden buttercup from the spring fields.

The buttercup belongs to a family of rather disagreeable plants. One of them produces a juice which was used by savages to poison arrow-heads, and others were used by beggars to produce blisters, and thus impose on charitable people. This ranunculus bears a Latin name, meaning 'the rascal ranunculus.'

THE USE OF AN ALARUM.

THE Gauchos, the natives of Argentina, are still very primitive in their habits, and understand little of modern ways. For instance, one of these men had three fingers of his hand blown off by the explosion of a gun, and, being very sturdy, would most likely, if left to himself, have taken but little notice of the affair. His employer, however, sent many miles for a doctor, who, when he arrived, bandaged the man's hand, and, to ensure his having a good rest, left a sleeping-draught to be taken at nine in the evening—for he had but lately come out to Argentina, and did not know that it was the custom of the Gauchos to go to bed at seven, or even earlier.

Two days later the injured man came to his employer and begged for the use of a certain alarum clock, of whose marvellous qualities he had heard.

'An alarum—why?' asked the employer. 'You are not wanted to work till your hand is cured.'

'No,' said the man, 'but the doctor left that sleeping-draught for me to take at nine o'clock, and every night I have gone to sleep before nine, so I want the alarum to wake me, and then all will be well.'

SUPPOSING.

IF I were a bumble-bee,
I should spend the hours
Gathering the sweet honey
From the pretty flowers.

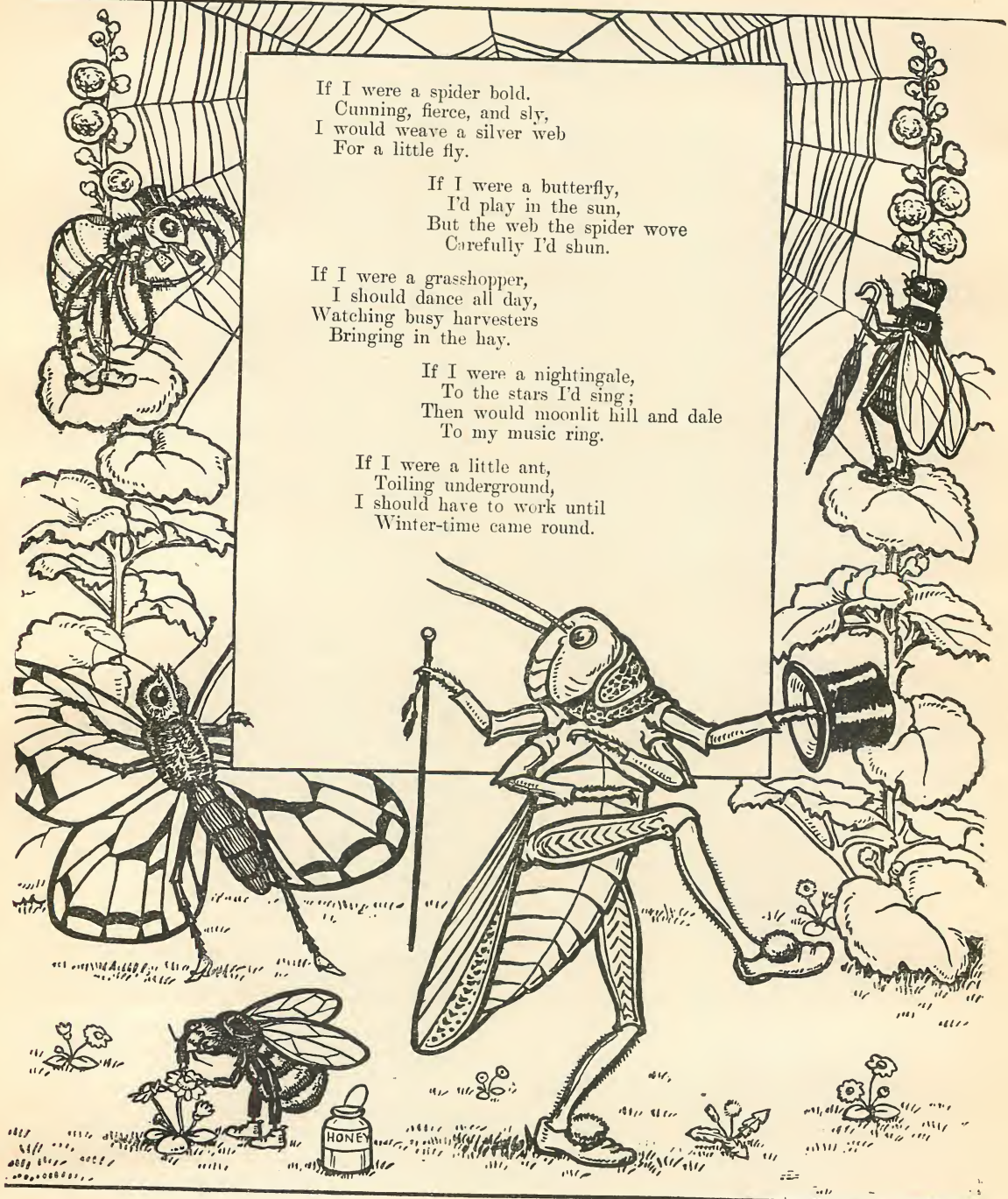
If I were a spider bold,
Cunning, fierce, and sly,
I would weave a silver web
For a little fly.

If I were a butterfly,
I'd play in the sun,
But the web the spider wove
Carefully I'd shun.

If I were a grasshopper,
I should dance all day,
Watching busy harvesters
Bringing in the hay.

If I were a nightingale,
To the stars I'd sing;
Then would moonlit hill and dale
To my music ring.

If I were a little ant,
Toiling underground,
I should have to work until
Winter-time came round.



But I've honey for my tea,
I can sing and dance;
So I'm glad I'm not a bee,
Or a bird by chance.

I would rather be a boy
With my toys to play,
Than a spider or an ant
Who works hard all day.



“‘Punch, that is too high! I shall fall out!’”

THE ‘LOCAL STAMEN.’

‘THERE are only two more weeks of the holidays,’ said Punch, dolefully. ‘Any one could tell that, because the apples are falling down—only

the little baddish ones, of course; all the best ones will stay on the trees until I have gone back to school. I do wish that we could do something really lovely for the last week, at least!’

‘Another flower-show,’ said Tony, clasping his

hands round his knees, for he was sitting on the lawn at his mother's feet.

'Pooh!' said Hetty.

'Or everybody have a shilling,' said Lally, looking fixedly at Aunt Ellen.

Aunt Ellen went on netting at her white crochet-work, and said nothing.

'I mean something really nice,' said Punch; 'something we have never had or done before.'

'My dear Punch, you have such high ambitions!' said Mother. 'Our thoughts cannot possibly soar so high: tell us what sort of things you mean?'

'Well,' said Punch, rubbing his nose, 'camping out, for instance. Think what jolly fun: a tent on the common! I know some fellows who did it in their home—but that was in Scotland. They said they had never had such jolly holidays in their life, and they took Bamford Major with them, and he said it was a thundering good time.'

'I should advise you to cultivate a contented spirit, Frank,' said Aunt Ellen. 'Henrietta, will you please find me another reel of cotton in my little bag?'

Henrietta shrugged her shoulders.

'Child,' said Aunt Ellen, 'some day those shoulders of yours will grow to your ears, and then you will be sorry to think that you were so impatient. Thank you; but that is not the right reel—it is an empty one: will you please look in my little bag again?'

'If Hetty's shoulders grow to her ears, we might have her in a circus and show her as a sort of new animal,' said Punch.

'And we would show you as an elephant, because of your long nose,' said Hetty, sharply. 'I'm sure I can't find this stup—this reel!'

'Very well, I will not trouble you,' said Aunt Ellen; 'hand the bag to me, please.'

'Hetty, how rude you are!' said Mother. 'I am afraid that Aunt Ellen will think you the most ungracious and unwilling little girl.'

'Hetty can be very obliging when she chooses,' said Aunt Ellen, grimly.

Hetty sat quite still for a few moments, then she got up and walked away.

'Aunt Ellen has spoilt all these holidays,' she muttered to herself.

When she had gone, there was a little silence, which Punch broke at last. 'Mother,' he said, 'do you suppose it would cost very much to hire a tent and camp out?'

'My dear Punch, I am sure it is quite impossible,' said Mother. 'Father could not afford it, so put it out of your head at once, dear.'

'Well, it does seem rather hard that we should always have to remember that we can't afford things,' said Punch. 'Other people seem to be able to manage. There is Mrs. Drew, who has taken Effie to the seaside, and Ronnie and Paul have gone to Scotland with a friend of their father. It's rather hard.'

Mother got suddenly red. 'I think that you are all very lucky children to have such a happy and lovely home,' she said.

'Oh, yes, it's very nice—I don't suppose there is another fellow that has a jollier home to go to for the holidays—I was only saying I should like to do

something a little exciting, said Punch. 'Well, I think I shall go for a stroll round.'

'Don't eat too many apples, then, dear,' said Mother. 'Two will be quite enough, and be careful that they are ripe. I thought you looked rather pale to-day.'

Punch stood still and looked blankly at her. 'Why, Mother, I have eaten at least six every day!' he said. 'I have had three already this morning. Really, I don't think they hurt me.'

'Then please don't eat any more to-day, dear, or we shall have you ill—six apples is enough to upset the strongest digestion, and remember that Dr. Drew is away, and if you are ill we shall have to call in the *locum tenens*.'

'Oh, no, thank you,' said Punch.

'I think he is a very nice man,' said Lally, from the three-legged little stool upon which she was sitting.

Dr. Drew's *locum tenens* was very tall; he had a big, curly moustache and kind brown eyes, and he had smiled at Lally and said, 'Well, little girl!'

Who knew? Perhaps he would have pill-boxes with sixpences in them, like Dr. Drew, or perhaps even shillings! Lally smacked her lips. 'If I had a shilling I could buy Mother a new bonnet,' she said to herself. She knew that Mother had said, only a day or two ago, that she was almost ashamed to go to Lady Greeson's garden-party for the third year running in the same bonnet, and that Father had said, 'My dear, I always think you look charming in that bonnet; but by all manner of means get another if you do not feel comfortable in it.' But Mother had not got a new one; she had only put some new pink roses in it and ironed out the strings.

'I would like to get Mother a new bonnet,' thought Lally; 'it should be green trimmed with—' her eyes travelled round the garden and stopped as she saw what she wanted—'trimmed with Miss Sturshums.' Then she got up and went thoughtfully away.

'Lally, where are you going?' said Mother.

Lally turned round; she was just going to say, 'To get you a bonnet,' but, after a long indrawn breath, she said, 'To amuse myself,' instead.

'Very well,' said Mother; 'don't be too much in the sun.'

'All right,' said Lally, and she went off to the kitchen garden. Hetty and Punch were in the plantation beyond playing in the swing, and Hetty's shrieks were half frightened, half excited:

'Punch! Punch! that is too high!—I am frightened!—I shall fall out!'

'Oh, no, you won't,' said Punch's voice; 'hold tight; and, I say, Hetty, do try to see if you can kick that branch up there!'

'Oh, but if I do I shall kick right over my head and come over on the other side!' screamed Hetty.

'They are playing a dangerous game,' thought Lally; 'it is very naughty of them.'

She went peeping about amongst the potatoes. They had a nice clean earthy smell, but their leaves were rather rough to touch, and Lally was glad when she had found what she was looking for. Then she went and sat on the wood-pile in the stable-yard, and spread six green apples out on her knees. They

were very hard indeed; but Lally had sharp teeth, and she bit them all up into little pieces, until there was hardly a scrap of them left, even of the cores. Then she jumped up and down on the wood-pile, and played that she was on board a ship; the wood-pile was made chiefly of pine branches, and it was very springy to jump on and very sweet to smell. Tony heard her game from under the chestnut-tree, where he still sat with Mother and Aunt Ellen, and he jumped to his feet.

'I do believe Lally is playing wrecked ship,' he said; 'I really must go,' and he bustled off, and Mother and Aunt Ellen were left alone.

(Concluded on page 226.)

THE BARE-FOOTED BOY.

CONRAD was minding goats one day. But he earned so little that he had never been able to save up enough to buy a pair of boots, and always went bare-footed. It happened to be very cold, and his poor feet were almost frozen.

A man came along who had already been twice in prison for stealing, and, seeing Conrad looking so miserable, said, 'If you will leave this work and come along with me, I will soon show you how to get a pair of boots. You never need go bare-footed in the mud again.'

But the boy replied, 'No! I would rather go bare-footed and remain honest, than gain a fortune by doing wrong. It is far better to have muddy feet than unclean hands.'

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 207.)

THE steep hill-wood, in which they were, consisted of a variety of trees: dark cryptomerias, pines, here and there an orange-tree with the green oranges upon its branches rapidly turning to gold; and in the undergrowth, all sorts of bushes and plants only to be found in sub-tropical climates.

Teddy seized a vine, and, taking his knife from his pocket, began to cut off a strange-looking fruit.

'We ought to have a spoon and some sugar,' he said, cutting the top off one of the fruits and handing it to Dick; 'but we haven't. Anyhow, scoop the inside out with your finger and see what it tastes like.'

'Jolly good,' replied the other, doing as he was directed. 'What is it?'

'Passion fruit. You know those flowers that look like little compasses—well, this is the fruit; it tastes like a lemon-water ice. Do you remember the feed we had at Carlisle the summer before last, that day we went in with the governor and he lost us, and found us at Bunn's the pastry-cook's, and you had sixty-four tarts and fifteen lemon-water ices and—'

Teddy was bending to pluck an unripe Alligator pear from a small vine growing near the ground, when the half of a cold passion fruit was thrust down between his collar and neck.

Next moment Dick Marley was on the ground and Teddy was sitting upon his chest.

'Pax!' said Marley. 'It was your fault. I didn't eat sixty-four tarts, and you jolly well know it; get up!'

Teddy, with a face very stern and grim, had plucked a long spear of grass, and with this he proceeded to tickle Marley's nostrils, the latter flinging his head about and snorting like a horse.

'What d'you mean by it?' inquired Teddy.

'Mean by what?'

'Thrusting that thing down my back.'

'What did you mean by saying I ate—'

'Hush!' said O'Brien, suddenly ceasing his operations with the spear of grass. He lifted his finger.

A deep musical sound, like a single stroke upon a distant bell, came floating up from the valley below. In a moment or two it was repeated.

O'Brien sprang to his feet with a horrified expression on his face.

'Bloodhounds! I had forgotten there is a fellow in this island who breeds them. I've heard of him. Quick, quick! Let's be off as hard as we can.'

Marley did not wait for a more pressing invitation. There was something in that bell-like sound quite beyond description when you knew what it meant. They ran, making all the time up-hill in a slanting direction.

When I say they ran I use a figure of speech, for at times they only crawled. Vine-tendrils crossed their path, and brambles, rocks, every obstacle that a wood could produce, and a few others, lay in the path.

'Hold up!' said Teddy, suddenly. *He paused, panting.* 'There's no use killing ourselves.'

He stopped and sniffed the air. 'Whew!' Then he glanced about, and, led by the smell that had assailed his nostrils, he approached a denser bit of wood on their right, and poked about. The object from which the smell came was a dead pole-cat lying on its back.

It was not what the ordinary person would call a 'find,' but a small gold-mine could not have better pleased O'Brien.

In a moment he had whipped a piece of string from his pocket and tied it with a reef-knot to the creature's tail; the string was about a yard and a half long. Searching in his pocket for a piece of paper, for Marley to hold the tail whilst he tied the string, he found an old envelope, which, when they had done with it, they foolishly threw away on the ground.

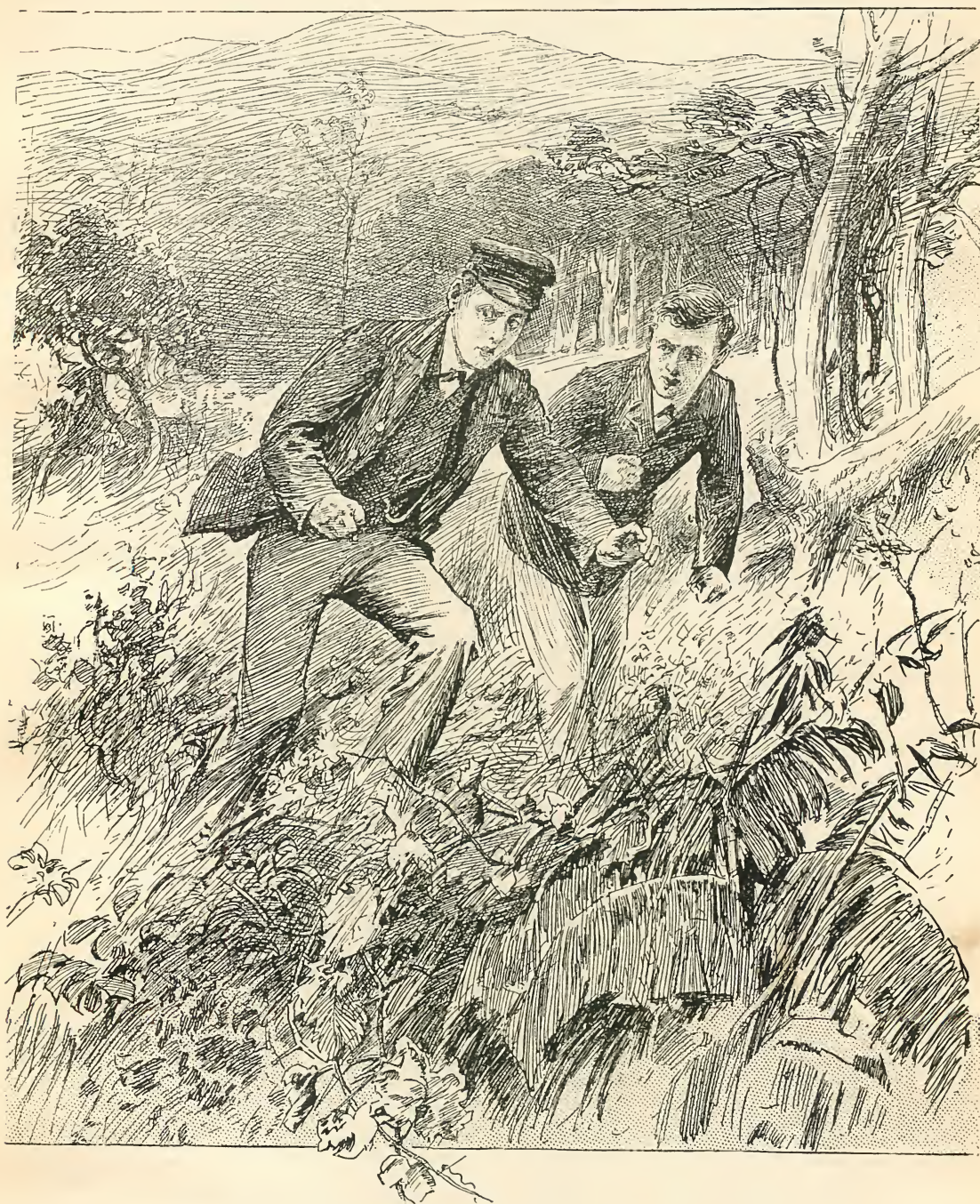
'Now we're fixed,' said Teddy. 'You go first, Dick, and I'll follow and drag this scent-bottle after us; and if any hound can pick our trail out of the result, it will be a wiser hound than any I ever met or heard of.'

'Ted,' said Marley, 'I believe you have got an idea for every possible thing that can possibly turn up.'

'I don't know about that,' said O'Brien, 'but I have fifteen thousand ideas of what to do with Diego if I could catch him unarmed, each one worse than the other—now drive ahead.'

They started, Marley leading the way, and Teddy following, dragging the pole-cat after him by the piece of string.

(Continued on page 218.)



“‘Let’s be off as hard as we can.’”



"He flung the tail as far as he could."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 215.)

CHAPTER XX.—THE FAT WOMAN.

THEY broke from the wood into a ravine strewn with great boulders; they were both nearly exhausted, but they kept on, determined to put the greatest distance possible between themselves and their pursuers.

In the last spurt through the brambles O'Brien had lost the pole-cat; it had 'come off' from its tail. But the tail remained.

'I can't stand it any longer,' at last cried O'Brien, flinging himself down in the shade of a great boulder. 'I'm dead beat.'

'So am I,' said Marley, flinging himself down on the grass beside his companion. 'I feel as if I had been running for a thousand years—listen!'

From far away in the wood came the quarrelling sound of bloodhounds suddenly at fault, very different from the clear bell-like note of the smoothly running pack.

'They've got to the pole-cat,' said Teddy. 'I hope they like it. It seemed bad enough to us; what must it smell like to those things whose noses are so refined?'

'What made the Spaniards desert the ship, I wonder?' said Marley, suddenly.

'I suppose when they had done with the cable they thought it better to leave her, and take to the islands and hide. There are always coasting schooners cruising about to take them off some time or another. You see I expect very likely the cable-hands and the other boat will land at Santa Cruz in Palma; that's the nearest port, and there is a cable from there to Teneriffe, and a ship will be sent to hunt for the *Kingfisher*; there is nearly always some kind of a tub of a Spanish gunboat at Las Palmas. It may be part of Alvarez's plan to land here and hide for a few months till things have blown over. I don't hear the dogs any longer: they have given up the chase, I expect. I say, it's well we didn't drop the cakes.'

Teddy stuck his teeth into his cake, and Marley did the same to his.

'If it had not been for Sloper,' said Marley, 'we would not have been here, for we should never have been able to do all we have done on an empty stomach.'

'If I ever meet Sloper again he shall have a bag of nuts,' said Teddy. 'We have had a wonderful escape. All the same—hark!'

From the woods came again the deep awful bell-note of the hounds running on a hot scent.

Teddy sprang to his feet. 'We are done for! They have put the hounds on to the pole-cat trail, but how have they done it? It must have been that bit of envelope I left behind: it touched the pole-cat, and they have put them on the scent of it.'

He stood for a moment in perplexity; then he took the string with the tail attached and flung it away as far as he could amidst the boulders.

'Now,' he said, 'as hard as you can, Dick!'

He led the way at full speed. It was easy running, for the turf was soft and springy, but there

was a lot of dodging to be done, for the boulders were strewn about, and there were volcanic pot-holes to be avoided, and here and there were little bushes, just like sage bushes, only waiting to catch the foot.

But they made good way, for, as O'Brien said afterwards, you never know what you can do in the way of running till you have bloodhounds on your track.

They had made a good distance, and had literally flung themselves down to rest, when on the wind from far away came the sound of the hounds at fault.

Very, very faint it was, but unmistakable.

'They are done this time for certain,' said O'Brien.

It seemed that he was right, for the wind brought nothing with it now but the faint rustle of the leaves of the little sage bushes and a scent of fennel. They were in a sort of valley, or gorge; on either side the hills rose abruptly, hills covered with a heather not unlike the purple heather of the highlands of Scotland. They had not lost their cake in their flight, and now they proceeded to attack it again. It was delicious, something like a cold soda-scone, but after the first mouthful they could not go on. You cannot eat if you are thirsty.

'I tell you what,' said O'Brien, breaking his loaf in two and sticking a piece into each of his side-pockets: 'we shall have to get out of the valley and prospect; there must be some houses or cottages amongst the hills here, but we can't see them till we do a climb.'

They got up and began to ascend the hill on their right; it was steep, and the climbing pretty hard in places; but before they had got half-way to the top they had their reward. On a little shelf of the hill, about the size of an ordinary dining-room floor, they came on a strawberry-bed—a regular carpet of strawberries, great luscious red strawberries, evidently a second crop produced by the luxurious climate.

O'Brien sat down right in the middle of the bed, and began to eat. Dick Marley did the same. When they had dined, they pursued their way.

(Continued on page 230.)

HOW SIR HENRY MORGAN OUTWITTED THE ENEMY.

THE notorious buccaneer, Sir Henry Morgan, had been on a marauding voyage to Maracaybo in Venezuela, but lingered so long at the scene of his coasting adventures that the Spaniards were enabled to fortify a castle at the mouth of the lake, on the shores of which the town in question is situated, and thus shut off his retreat. When at last he set out on the return journey, he found the outlet to the sea barred by the guns of the fortress, and realised that something more than dash and force was necessary to escape from the threatened danger. Stratagem alone could save him.

When within sight of the Spanish garrison, he ordered that all his ships should drop anchor, and, this being done, each ship lowered a boat, into which clambered a body of armed men. The little fleet of row-boats then set out for the shore, choosing a spot

well covered by undergrowth. Here, concealed from the watchers in the fort, the boats remained for as long as it would have taken to land the men. Then they put back to the ships, rowed by two oarsmen, while all their company lay hidden in the bottom, below the level of the bulwarks. On reaching the vessels they were careful to draw up on the side farthest from the enemy. Here they again loitered, the reclining men rose up as before, and the journey to land was repeated. All day long the passage to and fro was made, apparently carrying out boat-loads of men from the ships and returning with none. So convinced were the Spaniards, as they watched these manœuvres, that Morgan was landing a large force to attack them from the rear, that they moved the heavy guns which commanded the outlet of the lake, and planted them where they fancied they would be more useful. It was nightfall before the buccaneer's ships sent the last row-boat across. Then all was silent. With cautious movements the anchors were lifted, and, the tide setting out to sea, the vessels moved slowly down toward the castle. It was not until they were on a level with its walls that the Spaniards, anxiously expecting the land attack, became aware that they had been outwitted. In vain they sought to rectify the mistake. Morgan had unfurled his canvas; a clear, tropical moonlight showed him an open course, and with a light shore-wind in their sails, the whole fleet stood out to sea.

BURIED SUNLIGHT.

WHEN we sit by the pleasant fireside,
And watch the ruddy glow,
And the bright and glowing embers,
And the flames that come and go:
Oh, then we know that the brightness,
The warmth and the cheering glow,
Are only the buried sunlight—
The sunlight of long ago.

When we find, as we walk life's pathway,
The cheerful, pleasant tone,
And the kindly deeds done by the heart
That love has made its own:
Oh, then we know they are but the fruit
Of seed that the heart did sow;
They have come from the buried sunlight,
Sweet deeds done long ago.

DOORS, LOCKS, AND KEYS.

(Second Series.)

I.—HOW THE BOYS OF THE MARTINIÈRE HELPED TO SAVE INDIA.

AT the beginning of the last century a certain French soldier of fortune, General Claude Martin by name, decided to spend the remaining years of his life in Lucknow, the capital of the Province of Oude, and the fourth largest city of India. Here he erected a stately mansion, in which he lived, died, and was buried; and at his death it was bequeathed for a school for Christian boys, the sons of soldiers

by preference. The Martinière, so called in memory of its generous founder, has been a boon to thousands of Anglo-Indians, and at the time of the Mutiny in 1857 the sixty-five young fellows then resident, with their masters, gave real help in saving India for their Queen and country.

In this good work a door gave such powerful assistance that it deserves to be remembered; and although it is not possible to give a drawing of the actual woodwork, we may assume it to have been located on the first floor of the Martinière building, which still carries on its useful work.

As soon as the tidings arrived that the rebel Sepoys had taken the city, the elder boys were armed with muskets and carbines, whilst great stores of food and water were collected and placed in the upper rooms of the Martinière. No doubt the young fellows were excited and gratified at being turned into soldiers before their time, though the fact that the great earthen pots in which the water was stored had an evil trick of cracking at night, and pouring their contents on the sleepers below, must have done something to damp their enthusiasm.

Soon, however, the stern realities of living in a state of siege must have taught them to think little of trifling ills, for, although for a time college work went on, certain boys were told off as look-outs, and orders were given that at the first stroke of the alarm-bell every one should rush to the citadel in the centre of the building.

On August 10th the Sepoys made a determined attack on the Martinière, and the explosion of one of their mines threw down part of its front, the lives of the defenders being only saved by the fact that masters and boys had just assembled for prayers in an inner room. The Mutineers took possession of the lower floor; but they received effective notice to quit in the form of hand-grenades, which were dropped upon their heads through holes bored in the ceiling.

Several times the Sepoys tried to rush the building, and in one of these attacks were very near success, which would have meant certain death to masters and boys. Happily the prompt action of a certain Mr. Schilling, who with a few pupils succeeded in slamming and securing an important door in the very faces of the rebels, saved not only their own lives, but those of their companions in the Martinière.

Soon after this the risk of holding the Martinière was accounted too great, and orders came from headquarters that the mansion should be quitted, and its inhabitants take refuge in the Residency.

This was the name given to a group of buildings clustering round the tower of the actual Residency, and most ill-adapted for defence. Each house was turned into a defensive work with a small garrison, and crammed with fugitives from the city. Every space between the buildings was filled with anything that could possibly stop a bullet, and came handy. Mud walls and hastily-dug ditches were supplemented with barricades of strange materials—carriages, carts, casks, valuable furniture, pictures, and the contents of a valuable library of priceless books. Life comes first, and nothing was withheld; but, in spite of such sacrifices, there seems little doubt that a bolder enemy



"Hand-grenades were dropped through holes in the ceiling."

could have carried all with a determined attack. The Residency being already crowded with soldiers, civilians, and some five hundred women and children, the boys from the Martinière had to put up with odd holes and corners; however, they behaved splendidly, and were most useful in the work of defence.

How Lucknow was relieved is one of the great tales of history, and the names of Sir Henry Lawrence, Sir Henry Havelock, and Sir Colin Campbell are dearly loved by the descendants of all who went through the terrible experiences of Lucknow in 1857.

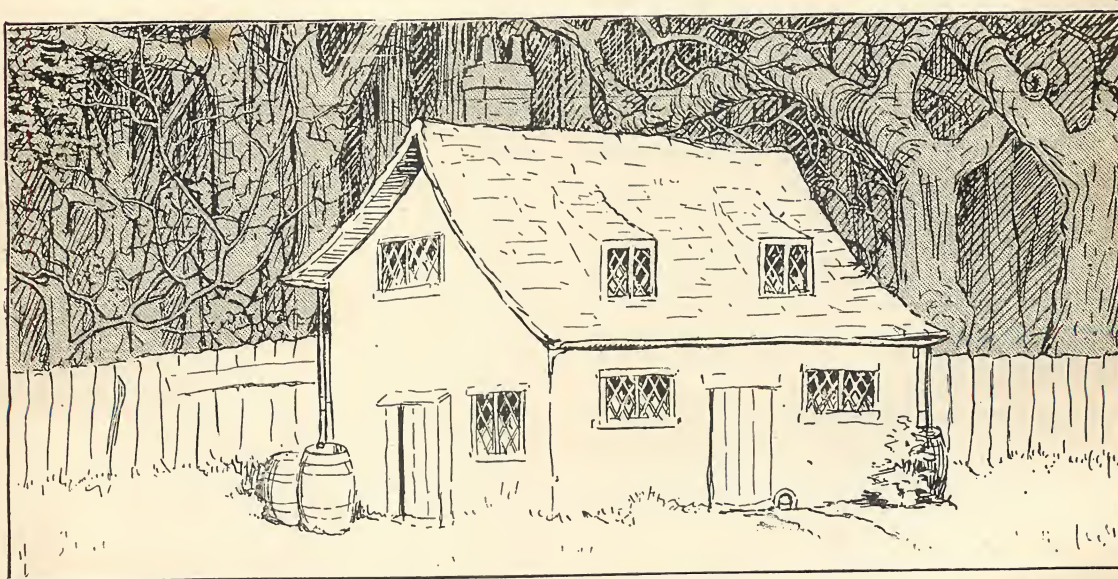
HELENA HEATH.



I.—Find the Pig stolen by Tom the Piper's Son.



II.—Find the Drake which swallowed the Frog who would a-wooing go.



III.—This is the House that Jack built. Find the Rat that ate the Malt, the Cat, the Dog, the Cow, the Maid, the Man, and the Parson.

A PAGE OF PICTURE PUZZLES.

THE FEAST OF FLOWERS.

ONE of the prettiest feasts of Sweden, though not the most important, is called *Fåbodvall* (the Feast of Flowers). The pleasure-loving *bonde* (or peasant) is always ready for holiday-making, and when so prosaic a matter as stacking a corn-rick, or building a barn, is thus honoured, we need feel no surprise that such an important event as the first turning out of cattle to pasture should be celebrated with great rejoicing.

Contrary to all other feasts, the Feast of Flowers has no fixed date. It depends upon the season. When the snow disappears, and the magic touch of spring floods the land with sudden glory, the farmer knows that it is time—and the cows know it too! They have been happy enough in their warm winter cow-house (*ladugård*), but they are as eager for the change as children with a holiday in prospect. Even in the cow-house they can tell that the snow has gone, for they can see the bright sunshine and smell the flowers through the open door. Why does not the master set them free without delay?

It is well for the foolish creatures that they have a master to care for them. Freedom would be no boon immediately, for wild beasts prowl in the forest, and until they have been driven away, the farmer will not trust his herd in the woodland pastures. Of these animals the wolf is most numerous and destructive, but bears and gluttons are also dreaded, and at no season are they so dangerous. In summer-time these brutes are to be seen only upon the mountains, or in wild, desolate parts of the forest; but now the long continuance of snow has compelled them, for hunger's sake, to leave their native crags and lurk round the habitations of man. Bears, too, awakened from their winter sleep, are roaming about, seeking to satisfy their ravenous appetites. What a time is this for driving a herd of peaceful cows and sheep into the forest glades!

The prudent farmer does not underrate the danger, nor does he fail to guard against it. The evening before he means to turn out his cattle, he and his neighbours light great bonfires in different parts of the forest, and endeavour to drive away the enemy by every means in their power. Fine fun for the boys! The housefathers may take their guns and their horns, but the tribe of shouting, jolly-faced boys, each beating a tin pan begged from Mother, makes a din far surpassing the powers of gunpowder and bark trumpets. For some hours, and often all night, this uproarious party traverses the woods, effectually terrifying all wild creatures and driving them to a distance.

In olden times this practice resulted from a superstitious fear of evil spirits rather than of wild beasts, for the demon of the woods was dreaded far more than mere wolves and bears. The said demon was, in fact, a very terrible bogie, for, not content with cattle, he sometimes (it was said) stole a young dairymaid by way of variety.

After this midnight demonstration comes the 'Feast of Flowers.' At an early hour the herd-boy leads his cows to the fresh pasture, and while they are rejoicing in their first feed of fresh spring grass, he employs himself in making garlands of green

leaves and flowers, and tying up a number of small nosegays. Then he cuts down a long straight shaft of mountain ash, from which he lops every leaf and twig, leaving only the stump end of a small branch near the top to serve as a hook.

And now he calls together his cows, hangs a garland upon the neck of each, and with strands of grass ties his posies to their horns. The animals accept these attentions, but are not so well pleased to find that they are expected to go home now, although it is not yet noon. It is hard to leave such tempting fare; yet the gentle creatures do not rebel, and follow their guide, reluctantly, towards the homestead.

Meanwhile the village maidens have also been busy gathering flowers and decorating the cow-house and other farm buildings. The gate leading into the yard receives especial attention. A large wreath is hung upon the post, and the gate is tied with strands of flowers, leaves, and grass. Here the dairymaid takes her stand, and a merry contest follows between her and the cowherd. But soon the mock battle is over, the gate is open, and the boy, catching up the wreath with the end of his staff, marches proudly along at the head of his gaily-dressed cows, blowing his horn as he goes to let folk know he is coming.

This trumpeting is not really needed, for all the inhabitants, dressed in gala costumes, are watching for the return. With shouts and merry laughter they troop out to welcome and caress their favourites, and accompany them to the *Ladugård*, where, during their absence, a table has been brought in and spread with all the delicacies of the season. As this festival is held in honour of the cows, the banquet is served in their house, otherwise how should they know that this is their own especial fête-day?

Their feelings are not likely to be hurt by neglect, at any rate, for they are the chief actors in the little drama throughout the day. As soon as they reach the homestead, their guests go about amongst them, patting their sleek sides and praising their beauty and docility, while the bright-eyed dairymaids have much to say of the disposition and talents peculiar to each.

The Bell-cow must now be selected, and this is a task needing care and deliberation. The young and thoughtless would choose the handsomest; not so the shrewd old farmer. His bell-cow must be a cow of character. If he were so unwise as to make choice of some frolicsome, coquettish simpton, much mischief might befall, for cows, like some other animals, are not fond of thinking for themselves—they follow their leader. The cow selected, then, is not the beauty of the *Ladugård*, but a staid, sober-minded individual, who may be trusted to set a good example to her light-minded sisters.

Here she stands—Queen of the Day—meek, docile, yet dignified, and fully conscious of her proud position. Never imagine that a dumb animal is incapable of such feelings; you have but to watch the calm assurance with which she takes her place as leader to feel certain that she fully appreciates her honours, and prides herself upon the due performance of her duties. It is, indeed, a well-known and well-proved fact that if, for any misconduct, the

bell-cow is deposed, and her sign of office removed to the neck of another, she takes the disgrace so seriously to heart that she pines, and has even been known to die of vexation!

This important ceremony over, the calves come upon the scene to receive their names. Their mothers stand round, while the dairy-maidens bring forward the four-footed babies, and the farmer, taking the ash-staff from the herd-boy, lightly strikes each calf across the shoulders and pronounces its name in a loud voice.

The cow-boy now resumes his staff, replaces the wreath, and, bearing it aloft like a flag, contrives to creep through a little window or trap-door at the back of the Ladugård, alighting upon a manure-heap in the rear of the building. Here he plants his ash-staff, and here it remains all through the summer, its faded wreath hanging dragged and forlorn, a monument of departed glory. The ash is, in this country, credited with many virtues, and a Ladugård protected by an ash-pole, or a heifer receiving with its name a blow from an ash-stick, is supposed to be henceforth safe from harm.

The business of the day over, the entire party—master and mistress, guests and servants—sit down to the good things prepared by the housemother and her maidens. The feast is shared also by the cows, who receive each a mess of fish, bread, and spiced porridge in honour of the day.

The Swedish peasant farmer is kind to animals. He loves his horse, and regards him as a friend and companion. Cows, too, are treated with gentleness and affection, especially by the women of the family, whose duty it is to care for them.

On all high days and holidays, the cows share the family festivities, and are indulged with an extra feed. They, as well as the children of the household, receive presents, kisses, and good wishes, but the great day for them is the Fåbodvall, when the bell-cow is chosen, the calves named, and winter quarters are exchanged for woodland pastures. The day of days for a Swedish cow is certainly her own special feast—the Feast of Flowers.

‘SALAMANDER.’

ONCE upon a time there was a brave young English officer, whose name was Lord Charles Hay, but who was called by his fellow-officers of the First Life Guards, ‘Salamander,’ because of his bravery under fire.

Upon one occasion, when a battle between the French and the English was at its height, young Hay was seen to step forth from the English line, and advance alone towards the enemy.

It seemed a most foolhardy thing to do, with the bullets flying about so thickly. Surely no mortal could live amid such a storm-shower of shot!

‘Come back! come back!’ shouted a dozen voices at once.

‘The young fool is mad!’ said the Colonel. ‘Come back this moment, you idiot!’ he roared.

Lord Charles took no notice of his friends’ shouts. Forward he went, and the English ceased firing, but a fresh volley burst from the French ranks, and smoke hid everything.

When the smoke cleared away, every one expected to see Lord Charles lying dead. But no! there he was, still marching onward.

And now the French grenadiers, beginning to perceive him through the smoke, in their turn ceased firing. For they thought that this single Englishman advancing so bravely towards them must be an emissary from the British General; thus the attention of all, both English and French, was concentrated on this one solitary figure between the two hosts. At that moment a gust of wind blew away the smoke and dust, and everybody saw what ‘Salamander’ was about.

The country in which this battle was fought was Belgium, and a little to the left of the English line stood some hovels inhabited by poor Flemish peasants. These peasants, instead of sensibly running away when the battle began, remained in their homes, thinking that the fight would soon go on in another direction, and leave them in safety.

But they found themselves mistaken. A sudden change in the position of the contending armies brought the cottages right into the line of fire, and the frightened peasants took to their heels, dragging with them their little children and such of their household goods as they were able to carry. One tiny girl, scarcely old enough to walk alone, had, in this hurried flight, either fallen or been forgotten. She was lying on the ground, midway between the French and English lines. Although she did not fully understand the danger, she was naturally terrified by the noise and smoke, and in the sudden silence some could hear her pitiful sobs. In the distance could be seen her mother, frantically trying to reach her, but held firmly by restraining hands.

With perfect coolness the young Guardsman strode on to the spot where the child lay. Tenderly he raised her in his arms, with gentle, soothing words, and the little one ceased crying at once. In order to restore her to her mother, he had to pass close to the enemy. He went on calmly as ever, keeping as far as possible his own body between the child and the French muskets.

‘Don’t fire, comrades!’ shouted a tall French soldier, whose face was begrimed with dust and powder. ‘He’s as good as an angel from Heaven, if he is an Englishman!’

And, indeed, Lord Charles, with his fair hair and flushed young face gleaming through the smoke, *did* somewhat resemble an angel in the picture of some ‘Old Master.’

A ringing cheer rose from the British ranks as the soldiers watched their hero bearing the child unharmed through such deadly peril, and that cheer was answered by another, equally hearty, from the French army.

Close to the cruel bayonet-points passed ‘Salamander,’ straight up to the child’s mother. As he gave up his light burden, he pressed a kiss on the little face, and was turning to go back to his own men, when a grand-looking old French officer, whose breast was covered with decorations, stepped forth with outstretched hand.

‘Monsieur,’ he said, with a low bow, ‘permit me the honour of shaking hands with the bravest man I have ever met.’



"He went on calmly as ever."

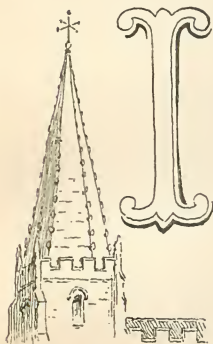


“He walked round the top coping, beating a drum.”

A HUNDRED YEARS AGO.

True Tales of the Year 1808.

II.—A NOTED STEEPLEJACK.



Tis just a hundred years since a Mr. Robert Wooton died at Nottingham; with his death perished one of the most daring steeplejacks that the country has ever known.

He was one of a family of steeplejacks, all of whom were noted for their reckless daring. He would climb any steeple, however high, without any scaffolding, and on one occasion, having repaired the lofty steeple of St. Peter's Church, Nottingham, he actually was foolhardy enough to walk round the top coping of the steeple, beating a drum, to the amazement of some thousands of spectators in the square below, who expected every moment to see him fall from his lofty eminence.

Robert Wooton, however, kept his head and his feet, and (if such a 'bull' may be allowed) he lived to die quietly in his bed.

A WONDERFUL MOUNTAIN.

WHEN King Winter rises from his northern bed and goes forth to sow, like seeds, his flakes of snow, one would hardly expect that he would scatter them so far south as almost to reach the tropics. We generally think of the palm-tree and the vine as safe beyond the limits of such chilly visitors; yet, in the Canary Isles, there is a lofty mountain, the summit of which is deeply covered with snow for many months of the year. It is the famous Peak of Teneriffe. It towers to a height of twelve thousand one hundred and seventy-two feet; its base is beautified by trees and plants eternally in leaf and flower; its crown is swept in desolation by freezing winds.

Hundreds of years ago the Peak of Teneriffe was an active volcano, and even now, near the summit, the soil is hot in many places. The great scientist, Von Humboldt, when he climbed to the top, tells us that he found his hands and face almost frozen, while his feet were baked by the subterranean fires. In the journey from the sea-coast town, which is situated on the skirts of the great mountain, to the summit, the traveller passes through several climates. At the base he finds the flowers of the tropics; higher up he comes to a region of laurels; beyond this there are such fir-woods as clothe the Norwegian mountains; above these a sandy desert and a rocky solitude. Once at the top, he is rewarded by a view of the entire group of the Canary Islands, and so clear is the atmosphere that quite small objects are visible upon the sea and earth beneath him. But to gain this reward, he must be willing to undertake great labour, and even suffer some distress; for the climb takes a very long day, and the rapid changes of temperature are, for many people, most difficult to bear.

HENRY THE NAVIGATOR.

SAID Henry Harold Horner, in the parlour cosy warm,
'I'd like to be a sailor when he's riding out a storm.

I'd scale the topmost rigging, though the wind might howl and rave,
And steer my ship with safety through the wild Atlantic wave.

Hurrah for Cook and Tasman! (Put some coal on, Teddy, *do!*)

This wind is simply piercing, and it chills me through and through.)

Hurrah for old Columbus, and the broad Pacific Sea! (Here, Ted, you've got the warmest place; suppose you change with me!)

There's not a bay or inlet that I would not well explore,

From Greenland's icy coast-line to the lone Antarctic shore;

There's not a rolling river— (Run and get me Mother's shawl,

And shut that door to stop the draught that's coming through the hall.)

There's not a rolling river, from Alaska to Hong Kong,

But I would sail its winding course, however strange or long;

And trouble should not check me, nor privation raise a bar,

For I would sail the very seas where difficulties are. And—

'Henry!' cried his mother, 'put your hat on, there's a man!

And take this letter to the post as quickly as you can.'

But Henry at the window glanced. 'It's jolly cold!' he said,

'And some one's got to poke the fire. *Suppose you take it, Ted!*'

THE 'LOCAL STAMEN.'

(Concluded from page 215.)

THAT afternoon there was to be a great treat; Mother told the children about it at dinner. Aunt Ellen was going to pay for it, and she had sent down to the village to tell Mr. Angler to bring round his big waggonette at half-past two, to take them all to the common to pick cranberries and to have tea afterwards in the heather, and in the evening Mr. Angler was to come and fetch them back again. Aunt Ellen and Mother were going too, and you can fancy what joy there was: for it was a very lovely day—just the very sort of day for the common. After dinner there was a great bustle of getting dressed, finding baskets, and packing the tea-hamper, and punctually at half-past two Mr. Angler arrived at the front door with the waggonette.

It was then that Lally began to cry. 'Oh, I have such a pain!' she said.

Everybody was getting into the waggonette; but now everybody stood still.

'Why, Lally, dear, don't cry,' said Mother, cheerfully. 'I dare say it will soon be better. There,

let me wipe your eyes. Jump into the carriage as fast as you can.'

'Oh, oh! it's worse!' screamed Lally.

'Where is the pain?' said Mother.

'It is all underneath my sash,' sobbed Lally.

'Well, would you rather stay at home with Sally?'

'Y—y—yes; I don't want to go to the picnic,' answered Lally.

'I think I had better stay with her,' said Mother. But there was such a cry of disappointment that she got back into the waggonette, after kissing Lally, and telling her to run to Sally as fast as she could; and they all drove off.

Lally went upstairs, weeping loudly as she went, and took off her coat and hat; but somehow or other the pain seemed to grow worse instead of better, and by-and-by Sally got really alarmed, and called up Cook.

Cook felt Lally's hands. 'She does burn!' she said. 'I hope there is nothing serious amiss. There, dear, don't cry like that—you will make the pain worse.'

'How would it be if I sent across for the doctor?'

said Sally doubtfully. 'If Dr. Drew was at home I'd send for him in a moment; but I don't know if the mistress would like me to call in a stranger to her.'

'Well, I don't know,' said Cook.

But soon Lally was much worse, and Cook ran across the road in her cap and apron, and rang the doctor's bell. The *locum tenens* was sitting out on the lawn, smoking and enjoying himself; but when he heard that Lally was ill he came across with Cook; and all at once, in the middle of the pain, Lally saw him standing by her.

'Why, little girl,' he said, 'what is the matter with you? Got a pain? Now, where is it, I wonder? You show me. Ah! there, is it? Well, well, let us get her on to the sofa, Nurse; she will be more comfortable there, and then we can find out more about this terrible pain. What has she had to eat to-day?'

'She has not had anything but what she usually has, sir,' answered Sally, half crying; 'the pain seemed to come on all of a sudden.'

'I have eaten six green little apples,' moaned Lally. 'I won't ever again.'

'Good gracious!' said Cook.

'What did you eat those for?' asked the *locum tenens*.

But Lally only burst into louder sobbing than ever, as a fresh pain shot through her.

'Fetch me some warm water and some mustard in a glass, please,' said the *locum tenens*, 'and while we are waiting for that we will put this nice hot-water bottle to the place where the pain is.'

Lally hugged the hot-water bottle and cried dismally, and by-and-by Cook came back with the glass of water and the mustard.

'Little girls who eat green apples always have dreadful pains like this,' said the *locum tenens*. 'They always have bad pain, and have to take medicine to make them better. Now, you must sit up and drink this down as fast as you can. No, no—don't do that; it must all go.'

Lally kicked and struggled, and tried to shut her mouth; but the *locum tenens* had got fast hold of her, and he pinched her nose so tightly that at last her mouth had to fly open, and then all the horrid warm medicine went straight down her throat.

When Mother and the children got home, they found Father standing on the doorstep waiting for them. He looked rather grave.

'Well,' said Mother, 'here we are all safe and sound, and we have had a splendid time—haven't we, darlings? Where is Lally?—better, I hope, poor girl!'

'Lally is not at all well,' answered Father. 'My dear, we have had a dreadful time with her, but I think all will be well now. When I got home at four o'clock I found Dr. Sparks here, and Lally really very ill indeed, and in great pain; but fortunately Dr. Sparks seemed to know what he was about, and I believe he thinks her quite satisfactory now. He is coming again this evening just to have a look at her; but he assures me there is no real cause for alarm now. The child had eaten six green apples!'

'I must go to her,' said Mother. She had grown quite pale. 'I wish I had stayed at home.' She found Lally asleep, looking very pale and little and pinched; and it was not until the next day that she knew why Lally had eaten the apples.

It was late in the evening and the sun had gone down, and it was cooler. Lally had been quite content to lie quietly in her little bed all the morning, but she came down to the sofa in the afternoon. Now she seemed to be more like herself again, and so Mother began to question her gently.

'Lally,' she said, 'what made you eat those apples?'

Lally blushed a little. 'You said that six green apples would make Punch ill, and I wanted to be ill,' she said.

'But why did you want to be ill?'

'I wanted the Local Stamen to come and see me, because I like him, and I wanted to get you a beautiful new bonnet, made of bright green and trimmed with Miss Sturshums, to go to the next party in,' confessed Lally.

'But how could your eating apples get me a new bonnet?' asked Mother, looking very puzzled.

'I thought—I thought that the Local Stamen would perhaps have little pill-boxes with sixpences in them, or perhaps even a shilling for a bonnet; but he hadn't,' said Lally, with a big sigh.

'I am very sorry you did that, Lally,' said Mother gravely. 'It is one of the naughtiest things a little girl could do to try and make herself ill; and as to my having a new bonnet—well, I should think Father could give me that when I really want it, shouldn't you? I am very glad that Dr. Sparks did not give you a pill-box with a shilling in it, and I am very glad that he has sent you this bottle of disagreeable medicine, which it is time for you to take now, for perhaps it will help you to remember what a very naughty thing it is to try and be ill. Sit up now, and open your mouth.'

Lally's cheeks were very red. She sat up and opened her mouth very wide, and gulped down the nasty medicine. 'I'm not good enough to have a lump



“‘Sit up now, and open your mouth.’”

of sugar to take away the taste, I know,’ she murmured; ‘but I shall be allowed to have a lump with my medicine when I am ill by mistake, shan’t I?’

‘Yes, certainly,’ answered Mother.
‘And I won’t ever make myself ill on purpose again,’ said Lally.



The Steel-mill in Use.

Old-fashioned Mine-lamps and Steel-mill.

INSTEAD OF THE SUN.**VII.—LIGHTS IN MINES.**

THE miner, working underground, must carry on his labours by the aid of an artificial light of

some kind. As a rule, there is nothing more convenient than a candle, and in most of the mines from which the ores of iron and other metals are obtained, ordinary candles are employed. They are very often used without a candlestick of any kind.

The work of a mine is usually going on in many places at once, some of which are higher than others, and have to be reached by means of ladders. In going up and down these ladders, it is just a little easier to carry a candle alone than it is to carry any form of candle-holder. When at work, the miner sticks his candle to the walls or floor of the mine by means of a lump of soft clay, or he may even stick it to his cap in the same way. But when there are strong currents of air in the mine, it is necessary to enclose the candle in some form of lantern of a simple kind.

In most coal-mines, however, it is quite impossible to make use of an ordinary lamp or candle which burns with a naked flame. The coal gives off a highly inflammable gas, which the collier has named fire-damp, because of its readiness to take fire and explode. When it explodes, it not only wrecks the galleries and structures of the mine, but it leaves behind it a suffocating gas, which the collier calls choke-damp. But for the fact that the explosion of the fire-damp causes the choke-damp, it would scarcely be possible to say which of these gases is more dangerous to the miner.

Though fire-damp is nearly always to be found in coal-mines, it is not always present in dangerous quantities. In the early days of coal-mining the colliers worked with candles and lamps, and took the risk. Many, many times no accident occurred, but now and then there was a dangerous explosion, and lives were lost. As the mines grew in size, and more men were employed in them, these explosions became more disastrous, and sometimes fifty, or a hundred, or even more men might be killed at once. Not only the miners and colliery-owners, but all thoughtful people desired that some safer way of lighting mines might be discovered.

Various attempts were made to provide a safe light, some of which were very curious. Phosphorescent lights were tried. Decaying fish often give out a phosphorescence, and some colliers took decayed fish-skins down into the mine to light them at their work. But this kind of light was not bright enough for general purposes.

A more successful light was obtained from a machine called a steel-mill. We have seen how sparks for making a light were obtained from flint and steel. The steel-mill was simply a machine for obtaining a continuous shower of such sparks, by the light of which the miner worked. It was a steel wheel, which was turned very quickly by means of a handle, while a boy held a flint against it. The boy accompanied the miner and worked the mill, while the man dug out the coal. The light was only a poor one, and though at first the miners thought that the sparks would not set the gas on fire, it was afterwards found that they did so occasionally.

At last Sir Humphrey Davy was invited to investigate the subject, and see if he could invent a safe lamp. He took the matter up in the middle of the year 1815, and early in November he was able to show how coal-mines could be lighted without danger.

Let us think for a moment what were the difficulties which he had to overcome. As the naked flame of a candle or a lamp set fire to the fire-damp,

it would have been an easy matter to prevent explosions if the flame could have been completely enclosed in a glass globe or lantern, which would have prevented it meeting the fire-damp. But this was impossible, because the flame itself would not burn unless a good supply of air was admitted to it. Sir Humphrey Davy knew, however, that a certain amount of heat is necessary before anything will burn, the amount varying with the substance to be lighted. He thought that if he could put something round the flame of a lamp which would prevent the heat passing outwards, without stopping the passage of the air to the flame, he would obtain a safe lamp. He experimented with fine wire gauze or netting, and he found that a flame would not pass through it until it was made hot, the reason of this being that the gauze took up and distributed the heat of the flame until there was not enough left to light the gas, which passed onwards through the gauze unburnt. That gas really did pass through to the other side of the gauze was proved by putting a lighted match on the side opposite the flame, when the gas was lighted, and burned just as it did on the other.

Here, then, was a way of making a safety-lamp. Though Sir Humphrey Davy could not completely enclose a flame in glass, he could enclose it in wire gauze; and while plenty of air could enter to feed the flame of such a lamp, sufficient heat could not pass out to light the fire-damp of the mine. The Davy safety-lamp is an ordinary oil-lamp, having a chimney and a cap made of gauze, and special arrangements for filling and trimming it without exposing the flame.

The celebrated engineer, George Stephenson, invented a somewhat similar lamp at the same time as Davy invented his. Both men worked independently, and both deserve equal credit. Stephenson's was probably the better lamp, but Davy understood better *why* the lamps were safe.

Electric light has been tried in mines, but is not much used; though it is perfectly safe in itself, it has the disadvantage of not showing the presence of poisonous gases, as the ordinary safety-lamps do.

W. A. ATKINSON.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 218.)

THE climbing became now very difficult indeed. These volcanic hills—and the whole of Gommera is simply a volcanic cluster that has humped itself out of the sea—present worse bits to the mountaineer than he will find even amidst the Alps.

After half-an-hour's work avoiding holes and skirting walls of black rock, smooth as plate-glass, and just as unclimbable, the two boys reached the top, and found themselves on the edge of an awful precipice, with the whole wide sea before them.

A blindingly blue sea it was, seen from these heights. There before them, a few miles away, lay the *Kingfisher*, deserted and forlorn, with the cable still at the bows. So clear was the air that they could make out every detail of her, even to the falls

dangling at the davits, and every spar, even to the boom of the patent log.

Away down south lay Teneriffe, veiled by a faint haze, with the Peak sharp-cut like a pyramid in the sky.

And in all that blue sea not a ship or the sign of a ship, not a boat, nothing to tell of life or the presence of man except the *Kingfisher*, idly floating—a painted ship, truly, upon a painted ocean—and another object.

A mile to westward of the *Kingfisher* still floated the decapod, a thing now twice, at least, the size of the thing O'Brien and Marley had rowed up to that morning. The heat of the sun had increased the volume of its gases, and now it floated a thing monstrous to behold and incredible when one remembered that it represented the body of a once-living creature.

The boys threw themselves down on the heather that covered the cliff-top.

'What a splendid pic-nic this would be,' grumbled O'Brien, 'if those villains would only let us alone!'

'The funniest thing is,' said Marley, 'that I don't feel particularly in a funk, though we *are* in a tight place.'

'That's just it,' said Teddy. 'People in tight places have no time for getting into a funk. A chap told me he had a fight with a madman once, and they each had the other by the throat, yet he said he wasn't a bit afraid all the time, though, when the thing was over, his teeth chattered and he dreamt of it for a month afterwards—what's that?'

The boom of a cannon came from the sea. They turned their eyes towards the water.

The decapod was gone.

'It's burst,' said Teddy, 'and we never saw it.'

'It must have vanished awfully quick.'

'Well, the sound took some time to come here. I'd have given anything to have seen that thing burst. Well, it's gone, and there's an end of it.'

'I wonder,' said Marley, 'what has happened to Mr. Jones, and the captain, and all of them?'

'Oh, they are safe enough!' said Teddy, gazing at the bit of sea from which the decapod had vanished. 'It has been fine weather, and they are sure to have made some of the islands, or been picked up, or something. Now we have rested, let's have a look round.'

He rose to his feet and surveyed the country; a most desolate prospect it was, though lit by the warm sun and domed by the perfect blue of the sky. Hills and ravines, slate-coloured rocks and purple heather, a few trees, and here and there a few goats grazing upon the sparse herbage.

'Look there,' said Marley, pointing to a spot a mile away lower down and to the east; 'isn't that a cottage of some sort?'

O'Brien shaded his eyes. 'It is, and we can reach it by walking along the cliff-top and dropping on it. There's sure to be food there, and we have lots of coin; and that reminds me—it won't take long—I will just count over the money and see if it's quite correct—O.K., as the telegraph people say.'

They sat down again, and produced from their

pockets the bank-notes and coin taken from the cash-box and proceeded to count them.

'I say, Ted,' said Marley, 'if you had not thought of pocketing the stuff, where would it have been now?'

'In Alonez's pocket, I suppose,' said Teddy, shovelling the sovereigns back into the bag, 'and we are sure to get a percentage for salving the stuff. Hurroo!'

He stuffed the bag in his pocket and rolled amidst the heather, literally flinging his heels in the air.

'You will lose that bag,' said Marley.

'No, I won't,' said O'Brien, sitting up with a flushed face. 'But I must give expression to my feelings,' as the old lady said when she belted the boy over the head with an umbrella for throwing orange-peel on the pavement. What won't we do next summer if we get out of this? I'm going to get a salmon-rod, and I'm going to get a real Harris tweed shooting-suit like the governor's, and—'

'Well, we shall have to get home first,' said Marley.

'True for you,' said Teddy, 'and we're not half-way there yet. Come along.'

They got up and made along the top of the cliff eastwards towards the little house they had seen.

The top of the cliff had evidently been used as a resting-place by thousands of sea-birds, to judge from the remains of nests and broken and addled eggs they came across. It also required careful walking, for there were a great number of pitfalls and cracks to be avoided.

But it was a glorious walk in the fresh, clear air, with the blue sea glittering on one side of them, and the strange, unknown, desolate land baking in the hot afternoon sun on the other side.

'Do you know what a sea-bird does the first thing when you catch one at sea and bring it aboard ship?' asked Teddy, who was leading the way.

'No.'

'It gets sea-sick.'

'Oh, rubbish!'

'It does. Ask any sailor, and he will tell you the same. I wish I had something to carry them in, and I'd collect some of these eggs. There are eggs here I've never seen before.'

'Listen!' said Marley; 'I hear some one singing.'

They had reached a part of the cliff just above the cottage they had caught sight of in the distance. Some one was singing a very monotonous sort of song, and the same one was evidently in the cottage, or near it, for the sound came up from there.

'It's a woman's voice,' said O'Brien, 'and it's coming from that cottage. Down we go, and if she is half as good a brick as that cripple girl, our fortunes are made.'

The descent to the cottage was easy enough. They passed a number of goats browsing here and there on the hill-side, who turned to look at the intruders with their wicked yellow eyes, champing and mumbling their food all the time.

(Continued on page 234.)



“They proceeded to count the bank-notes and coin.”



"It was a sight to make a cat laugh."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 231.)

IN front of the cottage the boys found the singer. She was an enormously fat woman, seated upon the ground, a stick beside her, and in her lap some sort of coarse needlework, upon which she was engaged, singing as she worked. When she saw the strangers she stopped singing, and seized her stick. Then she tried to rise, but failed. She was anchored by her own weight. Evidently she had been left sitting there by a son, or relation of some sort, who had not yet returned.

O'Brien took off his hat and approached her in a most polite manner; but before he could say three words she made a lunge at him with her stick, and nearly 'got him.'

'Bother the old cat!' cried he, hopping back. 'Dick, there is sure to be grub of some sort in the house. Just you nip in and get hold of some, whilst I engage her in conversation.'

But the fat woman was seated within stick-reach of the door. Whenever Marley tried to get in, she whirled round on him, with her stick upraised; and as for conversation, the only word she would utter was 'Vamose!' which in plain English means, 'Get away!'

'I am tired of this!' cried Teddy, at last, rushing in on the enemy, and receiving a savage blow on the side of the leg. Next moment he had hold of one end of the stick, whilst the woman clung on to the other. 'Now's your time, Dick!' he shouted, as Marley darted into the cottage. 'Take all the edibles you can see; we will pay her for them after. Quick, for she's pulling worse than that squid-fish Toms caught!'

She was, indeed, and it was a sight to make a cat laugh: Teddy clinging to one end of the stick; the fat woman at the other end, wriggling about on the ground, pulling him hither and thither, and making frantic efforts to rise. Sometimes Teddy would be nearly off his feet, and sometimes the fat woman would be nearly on hers.

At last Marley came out of the cottage. He had a large earthenware jug in one hand and a loaf and a huge sausage under his arm.

'I've got the grub!' cried he.

'Avast heaving!' cried Teddy, letting the stick go suddenly; and the fat woman, who was hauling at it for all she was worth, went flat on her back on the ground.

'I've got a few pesetas,*' said O'Brien, taking them from his trousers pocket. 'Hi, ma'am, see here!'

He flung a peseta to the woman, who was now sitting up, holding her head with one hand as if to make sure it was properly on. She grabbed the money with a scream of wonder and delight; for a peseta to these island people is as much as half-a-sovereign to an Englishman.

'And here's another,' said Teddy; 'and another. We are not robbers.'

The fat woman was now beaming with smiles.

'That's for the food,' said O'Brien; 'and here's another peseta for the jug. What's in the jug, Dick?'

'Milk,' answered Marley.

'Right! Now let's bunk. Good-day, señora.'

They left the señora sitting on the ground and counting the pesetas, evidently well pleased, and made off, taking to the higher ground on the left, away from the sea. They had been travelling perhaps half an hour when they came to a great cup-shaped depression on the hills. It might have been half a mile wide, so smooth, so green, and so perfectly hollowed out that it seemed more like the work of man than a work of nature. Opposite them, in the face of this amphitheatre, appeared what seemed the opening of a small cave.

'Let's make for over there,' said Marley. 'Looks like a cave, doesn't it?'

O'Brien shaded his eyes. 'It is; and it's not a bad thing to have a cave at one's elbow if one wants to hide. Heave ahead! but first you take a turn at carrying this milk-jug. I'll take charge of the sausage and the bread.'

They reached the cave-mouth panting and exhausted, so utterly tired out that they did not feel the slightest interest in exploring the place, but stretched themselves out at its mouth with the provisions between them.

It was now well on in the afternoon. How many miles they had made it was impossible to say, but of one thing they felt sure—they had out-distanced the pursuit.

The milk in the earthenware jug was goat's milk, rich and nutty in flavour, and, though they would have preferred water, it was not to be despised.

When they had rested for a couple of hours and dined, they began to make plans.

They determined to hide the things in the mouth of the cave, and to cut heather and sage-bush and make beds there for the night.

The cave-mouth was some six feet high; a full-grown man could have entered without stooping, and the tunnel seemed to run straight into the hill without diminishing in size.

They cut or pulled up armful after armful of sage-bush and heather, and carted them to their new abode, a wearisome business, and it was nearly dark when they had finished.

'This is better than sleeping in the open,' said Marley as he dived into his couch of heather when it was prepared.

O'Brien's only answer was a snore.

CHAPTER XXI.—THE DOUBLE CAVE.

WHEN they awoke, it was full day, and the sun was over the hill-top peeping in at the mouth of the cave, which faced East.

The milk in the jug had gone sour, but the sunlight disclosed a tiny rivulet of water which ran from the cave-wall absolutely without sound, following a channel in the rock till it was lost in darkness.

To drink, one had to press one's face to the rock, and one's nose got nearly as much as one's mouth; still, it was water, and the freshest and coldest water at that. This and the sausage and the bread made a breakfast not to be despised.

'If I only had a map or chart of this island,' said O'Brien when they had finished, 'I might furbish up some plan; as it is, I don't know a bit where we're

* Spanish silver coins, worth about sevenpence.

going. I only know we mustn't go westward, for that's the way we came.'

They were lying at the cave's mouth, with their heels in the heather and their heads in the sun, whilst he was saying this; and even as he spoke his eyes became fixed on a point of the bowl-shaped valley's rim right opposite to them.

A moving dot had appeared upon it, then another, then another.

'What is it?' asked Marley, seeing the other's strained attention.

'Them!' said Teddy, without stopping to be grammatical.

The dots were now minute human figures descending the slope of the valley—at least a dozen of them.

'I don't see any dogs,' said O'Brien; 'but that's Alonez's crowd, I'm certain. That fat woman we got the milk from is sure to have told all about us, and, to crown it all, we have gone and left the jug outside in front of the cave.'

'So we have,' said Marley.

They were both dumb for a moment. There was something appalling in this steadfast pursuit.

'It doesn't much matter about the jug,' at last said Teddy. 'They are sure to search the cave. The question is, how far does it go, and is there any possibility of our hiding ourselves in it? It's our only chance, Dick. Come along; let's explore it.'

'You have some matches?' asked Marley.

'Half a box; but we must use them carefully. Hark!'

A far-off shout came on the breeze. They looked out. The figures were running now, and converging on a line that would lead to the cave.

They had evidently spied the big jug outside it.

'Come along!' said O'Brien; and, without stopping even to gather up the remains of their food, they plunged into the darkness of the cavern.

(Continued on page 247.)

SOME FAMOUS CASTLES AND PALACES.

IV.—ALNWICK CASTLE.

MANY tales are told us of the wild scenes which occurred in the olden times along the borderland between England and Scotland. Not only were quarrels frequent between the two races, but the borderers of the same country did not agree amongst themselves. Happy were those who lived in a strong castle, and those also who happened to live near it had a chance of protection in time of danger. Generally a castle was built upon some high ground. So stands Alnwick Castle, overlooking the country round and the River Aln; but it has seen its grandest days: part has been pulled down, and changes have been made in what is left. When it had a garrison, the defenders were able to get a distant view of an approaching enemy. Happily there are pictures of the castle of old date, and even yet there is much to please the visitor who is fortunate enough to get admitted to a structure long connected with the famous family of the Percies.

Grose, the great antiquarian, has stated that there is proof that at Alnwick the Romans had a station or a fortress to watch the movements of the northern Picts. Roman bricks are well known, and have been found here. But we do not read of the castle till the time of the Saxons. At the Conquest it belonged to Gilbert Tyson, one of the most powerful chiefs of Northumberland. A remarkable event in its history was the siege by Malcolm, King of Scotland, in the reign of William Rufus. The defenders of the castle escaped by a trick. After the siege had lasted some time they sent out a soldier fully armed, having the keys of the castle tied to his spear. As he approached, King Malcolm thought he came out to surrender the castle, and rode out hastily to receive the keys. But the soldier struck the king with the spear, giving him a fatal wound, then galloped back in the confusion before he could be seized. Soon afterwards a battle was fought near the walls, and the King's son, Prince Edward, was killed, so the Scots retreated. At another siege of Alnwick Castle, in 1174, William the Lion, King of Scotland, was taken prisoner by the English, and had to pay ransom, the sum of one hundred thousand pounds, which was at that time an immense amount. It was many times besieged during the border wars, but seldom taken, owing to its great strength, though now and then the Scots succeeded in cutting off all supplies of food, so that the garrison was starved out.

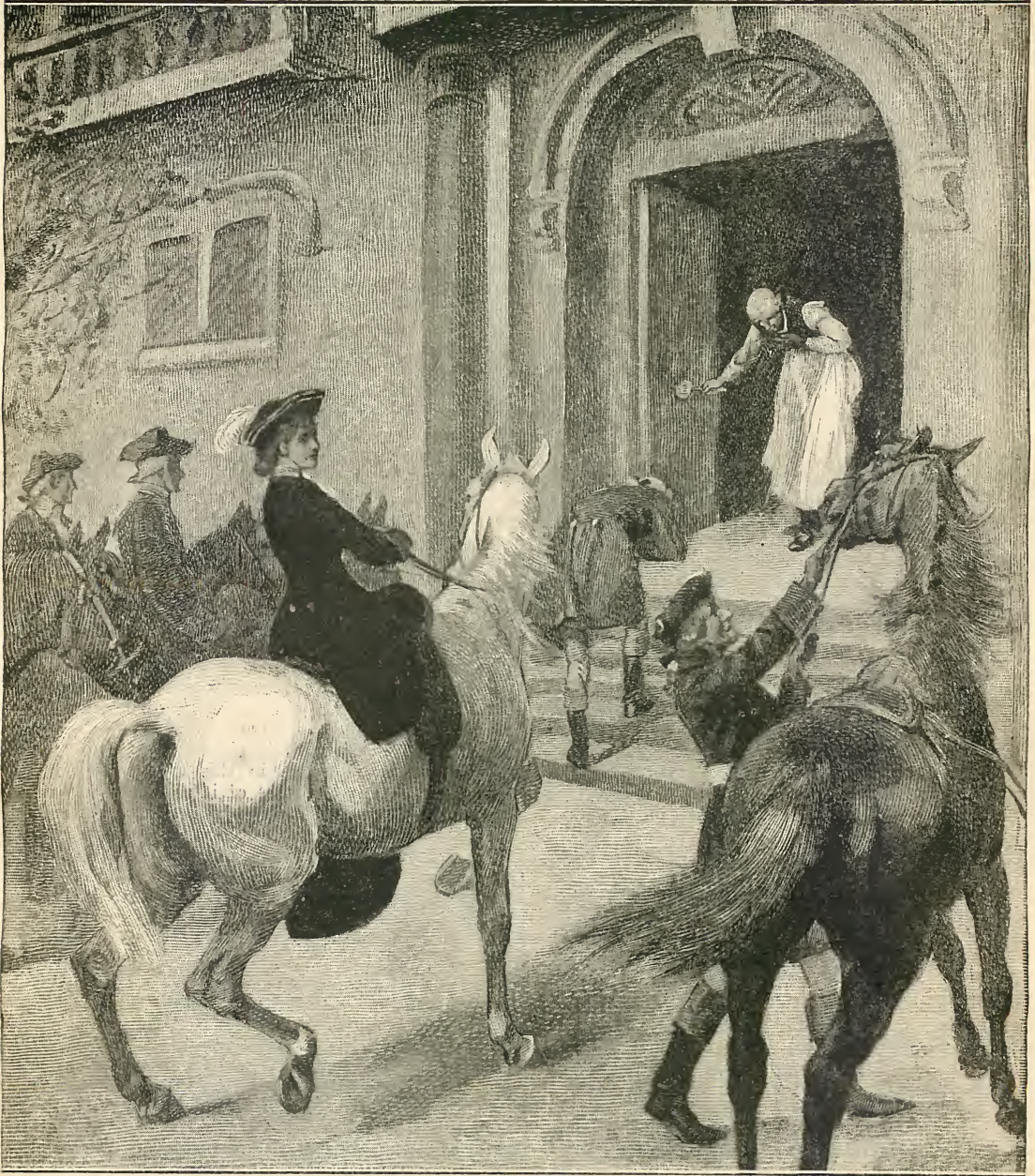
In or about 1310, while Edward II. reigned, it became the possession of the noble Percy family, and has been held by them ever since. It is one of the residences of the present Duke of Northumberland.

At the beginning of the eighteenth century many alterations were made in this old castle; ruins were taken away, and part of it rebuilt. One very remarkable tower, called the 'Constable's Tower,' at one time had arms for fifteen hundred men, used by the Percy tenants. In the Record Tower all the books and papers were stored; at the top of it is a large banqueting-room. Then the Raven's Tower had also the odd name of Hotspur's Chair.

THE DUKE'S SOUP-KITCHEN.

IT is pleasant, in the history of those evil days when the clouds of the Revolution were gathering over France, to come upon such a character as that of the good Duc de Penthièvre. Unlike most of the nobility, who spent their time in Paris, leaving their tenants to the mercy of the *intendant* or bailiff, the Duke lived upon his estates, content with the society of his daughter and his young widowed daughter-in-law, the Princesse de Lamballe, the faithful friend of the hapless Queen Marie Antoinette, and afterwards one of the most innocent victims of the Revolutionists. To his poorer neighbours the Duke was the kindest of benefactors, and he and his secretary, the poet Florian, vied with each other in hunting for cases of distress, sick folk and orphans to relieve, and penniless maidens to be provided with a marriage portion.

On one occasion a royal hunting party, finding



"The Duke himself appeared, girded with a big apron."

themselves near the Duke's château, decided to invade him, and presented themselves at the gates, a gay and goodly company, vowing themselves very hungry and begging for something to eat. In reply to the summons the good Duke himself appeared, girded with a big apron and brandishing a soup-ladle. On this particular day of the week, he informed them,

he always prepared himself the soup for the sick and poor of the village, and of that they were quite welcome to share. We should like to know that the Duke's cookery was as good as his heart; at any rate, his guests had a glimpse of a simpler, kinder life than was known to most French noblemen of that evil age.



“As a mark of esteem, he handed to him the golden snuff-box.”

THE GOLDEN SNUFF-BOX.

A COLONEL was showing his new golden snuff-box to some brother-officers who were dining with him. Presently he wanted to take a pinch of

snuff, and, after searching in every pocket, said, with some alarm, ‘One of you must have put my snuff-box in his pocket in mistake. Do you all mind looking?’

They stood up at once and turned their pockets

inside out, but nothing was seen of the snuff-box. The ensign alone, the youngest officer of them all, made no attempt to rise, and sat looking on in silence. Feeling all their eyes fixed on him, he said, 'I will not turn my pockets out, but must beg of you to accept my word of honour that I know nothing about the snuff-box.'

The officers rose in silence, convinced that he was the thief, and left him alone. The next morning the colonel sent for him, and said, 'I have found the snuff-box. It had fallen down into the lining of my coat. But I want you to explain to me why you would not turn your pockets out, as the rest did.'

The young ensign replied, 'To you alone, Colonel, will I explain. My parents are very poor. Every day I give them half my pay and food. To-day, when you invited me, I had part of my dinner in my pocket, and I was ashamed to let my brother-officers see me turn it out. That is why I refused.'

The colonel's eyes filled with tears as he heard this explanation. 'You are a noble man, and, henceforth, you shall dine every day with me. In that way you will be able to give your parents more help.'

He again invited the officers to dinner, proved to them all the innocence of the young ensign, and then, as a mark of his esteem, handed to him the golden snuff-box as a present.

IN THE GRIP OF THE ARABS.

Founded on Fact.

'WHAT a bad-looking lot!'

Captain Gregory, of the Rhodesia Mounted Police, reined up his horse to witness the procession of Arab traders who were crossing over to Bechuana-land. The befrocked and turbaned fellows, for the most part, returned his glare with dull, evil eyes, but there were chiefs among the band who hung their heads as they hurried by, and the captain made a note of it.

'Rubber—and ivory, I suppose,' remarked a trooper alongside, 'is the stuff they deal in, Captain?'

'That's not all. The trick they are fond of practising is to "hire" black labour to carry back their produce to the coast, and then to pay the poor fellows no wages. You see them now travelling along the recognised route; but will they return the same way? No, Clarke. To hide their long strings of burden-bearers they will creep back through the scrub, and avoid the towns.'

'What a shame!' commented Clarke, as the last of the gang disappeared. 'It's a difficult thing to tackle, I see,' he added, 'because the offence doesn't happen till the end of the journey.'

'Just so. It will happen somewhere on the coast south of Zanzibar, in about six weeks' time. The blacks will look for their wages, and get nothing. The Arabs will have had free portage for all their goods.'

Trooper Clarke was interested. 'I should dearly like to waylay them as they come back,' he declared. 'Give me leave, Captain, and I'll look out for them,' he begged.

'As you please, Clarke. There's nothing serious on hand now.'

A month later found Clarke patrolling the scrub from ten miles north of the town to a corresponding

distance southward, peering westward from precipitous peaks or the tops of tall trees, till his eyes were blinded with the glare of the sunny stretches. The Arabs were slow in returning, and he had almost given up the watch, thinking they must have passed him further north, when one afternoon he saw them—a long, thin line of black dots—moving through the trees. They followed, as his captain had said, no beaten track; they made a way for themselves. Clarke made mental calculations, and rode out to intercept them.

He tied his horse to a tree, and crept stealthily into their line of march. When they were in sight he climbed a tall palm, and crouched low in its abundant foliage.

The procession passed, slowly and wearily, almost beneath him. 'Forced labour!' he exclaimed, half-aloud, as he saw the laden blacks stumbling along beneath loads of rubber, and other merchandise, with drawn faces and mouths that gaped in pain. Clarke saw, and pitied; but the surprise of the procession came at its extreme tail-end. 'A white boy!' he whispered. 'No, two white boys!'

They brought up the rear, save for an Arab guard—a couple of perspiring youngsters, of fourteen or sixteen, in rags that had once been white flannels, and hats without brims. They had evidently been on the journey some days, and showed signs of footsoreness and general weariness. Brothers, they seemed, the trooper thought; but they passed quickly, and his inspection of them was brief. When the coast was clear he tumbled down from the tree.

'This wants seeing into,' he muttered, savagely. 'Must report without delay.' He pelted down into the hollow where he had tethered his horse, mounted, and picked his way to a track that crossed the plain ahead. Then he set his horse at a gallop.

'Say, Captain,' he panted, as he drew rein at his chief's side in the town street, 'I have seen them—the Arab lot—and they have a pair of white youngsters towing in their rear.'

He saw his chief's eyes open wide as he repeated his story. 'You have contracted sunstroke, Clarke,' was the captain's verdict. 'I'm very sorry. Come indoors and lie down awhile.'

Clarke snorted in undisguised disdain. 'Get the rest of the men out,' he retorted, 'and get help from Deeping Out. That's our best plan, Captain!'

Convinced in a moment, the chief of police was already spurring his mount in a race to the station. In a very short space of time he had half-a-dozen helpers round him, tearing at their horses' harness, and clamouring for details as they mounted. Trooper Clarke, impatient at the gate, waited to lead them on the Arabs' track. Presently they trotted out, spurred their steeds to a gallop, and followed their comrade across the plain.

The Arabs, keen of hearing, detected the troopers' approach a few minutes before they appeared in sight. The guard at the rear had halted, listened, then looked around in alarm. A moment later he gave a shrill whistle, the procession wheeled round, it plunged into the dense undergrowth alongside, and was hidden from view. The weary blacks, unconscious of the object of this manoeuvre, were yet grateful for the rest and the cool shade.

Trooper Clarke went racing by, his comrades after him. Evil eyes from beneath the shrubs saw him pass, and a consultation ensued the moment his band had disappeared.

Half a mile to the left was a river, and the roar of a cataract sounded through the bush. It suggested to the traders their second stratagem. The blacks were whipped to their feet, and hurried off to the river's brink. They followed the bank a distance, the river widened, and grew shallow. In half an hour they had crossed. On the opposite bank they retraced their steps up-stream, reaching eventually a point where the stream, though narrow, ran deep and dangerous. Their point was gained; they had placed the river between themselves and the British police, and they proceeded to encamp on the spot.

Captain Gregory imagined his earlier surmise had been correct, and that Clarke was really suffering from sunstroke, when they had travelled half a score of miles, and seen nothing whatever of the Arabs. Clarke reined up at length, shaking his head shamefacedly, but still confident. 'We have passed them somehow!' he declared. 'They are in hiding, I'm sure! Come back, boys! Let's divide and search the district. At their pace, they can't be far away.'

The men therefore divided, and one of them took a course that led down the river-bank, and brought him immediately opposite the Arabs' encampment. His loud hallo brought the rest of his friends to his side.

Among the first to dash through the scrub was Clarke. 'There they are!' he cried, proudly. 'Didn't I tell you? Now, Captain, shall I bawl across and ask them what they mean by it?'

'No, I'll do that.' The chief of police, making a trumpet of his hands, sent over a loud call, 'Hallo, there!'

The effect of this was to bring two or three of the Arab leaders to the brink of the gulf that intervened, where they stood vacantly staring across.

Captain Gregory leapt from his horse. 'You have with you two white boys!' he called across. 'What are they doing with you?'

It was one of the 'white boys' himself who interpreted this call to the Arabs. They had thrust him into the background, but the officer's voice reached him plainly. He sprang up at the sound of the familiar English, and burst into the group on the bank. 'He wants to know,' he shouted to his captors, frantically, 'what you are doing with me—and Tom. He's a police officer, and can put you all in prison. Just make haste and tell me what I've got to say to him.'

The Arabs, seeing it was useless to hide his presence now that he had been seen, instructed him to convey to the officer their version of the tale.

'I say,' shouted the boy, as he turned from the traders and faced the officer, 'how long are you going to be before you fetch me—and Tom? Tom's sick. He's just stretched on his back as white as anything.'

'How do you come to be travelling with these rascals?' shouted Captain Gregory.

'Oh, I and Tom were exploring, and we saw something—something the Arabs didn't want us to see—they were kidnapping a lot of blacks—and they made us go with them, so that we shouldn't tell, and so that we can come back home with the village people.'

'But you're telling now, sonny.'

'They don't know that! They can't speak more than ten words of English; they have been trying to make me and Tom understand all the way. They think I'm telling you how I and Tom kindly offered to show them an easier way back to the coast—that's what they think I'm shouting at you about, or they wouldn't let me—'

'Who's your father?'

'The missionary at Nararamba; but he's away up-country.'

'And don't you want to go home?'

'Rather; but these people won't let me.'

'Have they been kind to you?'

'Yes, so far; but I don't like them.'

'Can you swim, boy?'

'Ever since I was nine—yes. Dad taught me.'

'Would you like to come across here? It's deep, but the water's smooth. I'll see you get across safely.'

'Not without Tom; besides, these men have got guns. If they should guess what I'm telling you, they might shoot me—they shot a carrier yesterday down over there.'

'Well, can you tell me how I'm to get across?'

The boy lifted a hand involuntarily to indicate the spot, but this signal betrayed him. Before he could utter any direction as to the crossing, the Arabs had seized him from behind and dragged him from the bank; the whistle of the guard sounded shrill, and the blacks responded, though with reluctance. Every man was on his feet soon, however, for they knew the penalty for misbehaviour; burdens were hoisted on shoulders, and the wooded stretch on their left quickly swallowed up the column.

'Good-bye, sonny,' the white boy heard the captain cry. 'Look well after Tom—I'll see you later.'

It was Trooper Clarke who at last found the ford half a mile further down; he plunged across, and on the bank beyond stood awaiting orders.

'Ride right into them,' said the captain, quietly. 'Bowl them over if they lift a hand—we must get those two lads.'

The white boy saw the Arabs hoist his brother on to the shoulders of two blacks and send him on to the head of the party; he felt himself gripped by the wrist and dragged roughly over the bracken, then he heard behind him the thunder of advancing horsemen. There was the sharp crack of a rifle or two, and then a trooper swooped down on him and lifted him to the saddle behind by the neck of his shirt, and while the boy hung on to the great body of the man in front of him, he saw two others at a distance transferring Tom to a similar position.

As Clarke galloped off with him there were dusky figures running alongside, outpacing the horse, rushing on to the ford, dashing back home to the village in the wilds.

'Hurrah!' cried the trooper, 'the chief's set them all free! I thought he'd have to do something like that and get himself into a fix.'

So it came to pass that a company of Arab merchantmen found themselves in a desert place with much wealth of merchandise lying around them, but bereft of servants to help them to carry it to its destination.

J. W. H. H.



“He felt himself gripped by the wrist and dragged roughly over the bracken.”



Innocence, by Jean Baptiste Greuze.

PICTURES AND THEIR PAINTERS.

From the Wallace Collection, London.

VI.—GREUZE.

IN the year 1755, when the gay city of Paris was at her maddest and gayest, and her people danced and jested away the hours with little thought of the dark days to come, crowds of fashionable folk were thronging to the annual exhibition of pictures at the Salon to admire and discuss the work of an artist who had lately rushed into fame. His picture of an old peasant, seated in his cottage kitchen, reading the Bible to his children, owed its popularity to something besides the skill with which it was painted. The eighteenth century was an artificial age, the time of rouge and powder and hoops, when ladies received their guests at their toilet because it took most of the morning to arrange their hair. The picture galleries were full of paintings of shepherdesses, tripping in high-heeled shoes over smooth lawns, and shepherds whose dainty array would have suffered sorely in a shower. And then, in the last half of the century, the tide set the other way, and there was a rage for simplicity, a sort of sham simplicity which made the Parisian ladies carry their babies to parties on their backs, and run after the old American, Benjamin Franklin, because he wore a plain coat and unpowdered hair.

And so the pictures of cottage-life, by Jean Baptiste Greuze, fitted the taste of the time, and the crowds at the Paris Salon had no praises high enough for the painter who was using his art to immortalise such humble domestic subjects. It must be admitted that Greuze had quite as good an opinion of himself as the public had of him. Since he first came to Paris from Lyons, where he had studied under the portrait-painter Grandon, he had always been convinced that nothing but the jealousy and prejudice of his fellow-artists could stand in the way of his advancement. A soft-hearted, kindly, irritable, rather conceited young man was this fashionable painter, one who was sure to meet with some hard knocks in his passage through this rough world of ups and downs.

One sore disappointment he brought upon himself by trying, as many a clever man has done before and since, to excel in work for which he was not fitted. After a stay of two years in Italy, he became ambitious to distinguish himself as a painter of historical subjects, and, when called upon for a picture to be presented to the Academy if he should be elected a member, he chose to represent the Emperor Severus reproaching his son, Caracalla, for his attempt to assassinate him. Great was the painter's chagrin when he was informed that the Academicians had elected him on the strength of his earlier pictures of humble life, his treatment of the grand classical subject being quite unworthy of the Academy and of himself.

But the pictures by which Greuze will always be known are neither the historical paintings he admired, nor the rather theatrical peasants who were popular with the people of his day, but the beautiful heads of boys and girls, such as the one which forms our illustration. His children, with their fresh,


peach-blossom cheeks, their great soft eyes and fair curling hair, smile at us out of the pictures to-day—little ones who never grow old, who played and laughed, as little children do, while the black cloud of the Revolution darkened over France. They have been copied so often that many are quite familiar—the gentle 'Innocence,' clasping her lamb; the bent head of the 'Listening Girl'; and that demure little maid turning away from the fountain with her lap full of flowers and her arm through the handle of her broken jug. How strange that the hand which painted those rosy cheeks and clear, untroubled eyes should have given us also a famous portrait of Robespierre, who shed the blood of his countrymen with such remorseless fury, and at whose death the distracted city went wild with joy.

The end of the artist's life-story is a sad one. His married life was embittered by the terrible temper and reckless extravagance of his wife. The Revolution put him out of favour; his lordly patrons went their sad way to the prison and the guillotine. A few friends and pupils were still faithful to the old man, but his last years were passed in poverty and bitterness of spirit.

As we look at his pictures now, we smile a little at the style which pleased the taste of his age. In spite of all the talk about 'coming back to nature,' there is not very much study of real nature in the country scenes of Jean Baptiste Greuze. The old peasant fathers and sentimental maidens seem to be posing for their portraits; the pensive milkmaid has not much to do with real butter-making, and the fair washerwoman, with her dainty little bowl, is not the person with whom we should trust our clothes. But the soft children's faces are as sweet and lovable now as when they sat for their pictures in Greuze's studio, and they come to us like a kindly message from the tender-hearted painter whose lot was cast in such wild days.

MARY H. DEBENHAM.

ECHOES.

 LL little things, that on the earth
Our eyes do daily see,
Are echoes of the larger things
And mightier that be.

The little hills set here and there,
That tiny feet can climb,
Are echoes of the mountains high,
That tower with height sublime.

The tiny rills, that all day long
Go singing through the plain,
Are echoes of the vaster sea,
The mighty flowing main.

The little stars, that one by one
Are twinkling through the night,
Are echoes of the mighty sun,
That fills the world with light.

And little deeds by children wrought,
If they be truly done,
Are echoes of the deathless deeds
That lasting glory won.

USE AND ORNAMENT.

THE Corporation of Glasgow once asked a famous man to suggest an inscription for a Nelson memorial which they had just erected in one of the chief squares.

'The shorter the inscription the better,' said he. 'What do you think of *Glasgow to Nelson*?'

All seemed pleased, and one baillie was especially so. 'Capital!' he said. 'Nothing could be better.' And he went on, 'As the town of Nelson is not far from here, might we not just make it "*Glasgow to Nelson* six miles," and so it would serve for a milestone as well as a monument.'

THE SAND-MARTIN'S NURSERY.

'OH, to be in England now that April's there,' wrote the poet Browning; and the sand-martins, as they hovered in busy happiness about the face of the sandstone cliff, seemed in their own way to agree with him.

Some were already sounding the rock with their beaks, seeking a good place to start boring, and others, even more advanced, showed the beginning of a tunnel picked out by those tiny beaks, the bird twisting round and round, as though its legs were the screw upon which this wonderful living boring-machine turned.

But a small number of martins, the young birds of last year, hung about in an aimless, discontented fashion, having clearly no fancy for the task of home-making under these conditions.

One in particular, less troubled by laziness than by want of confidence in the natural powers given her for her work, was terrified to learn that her own tiny bill and claws were the tools with which she was expected to chip out a tunnel, some two or three feet long, in sandstone hard enough to turn the edge of a knife.

'Of course I see the others trying it,' cried little Hirundo to a neighbour, who had stopped his own work to cheer her on; 'but I expect every minute to see them splinter their beaks or break their necks.'

'But, my dear friend, it has been done hundreds and thousands of times by our family, for more generations, I suppose, than there are feathers on your body.'

'I must be quite unlike my relations, then,' sighed the other, sadly. 'The thing seems impossible to me; perhaps in those old days things were different.'

A troop of idlers, her mate among them, now swooped down upon Hirundo; and her companion, as he darted away, caught among the chorus of voices the words, 'Such soft sand, easy enough for a fledgling to work in, the very place for us.'

'Take care!' he called back over his wing; 'easy beginnings do not always bring the best ends.'

But the others were too eager with their discovery to heed him; and even the timid Hirundo gaining courage from their words, she and her friends were soon busily boring in a soft belt of sand lying between the layers of harder stone, twenty or thirty feet lower down the cliff.

Oh, how easy it was! a big hole was made in no time; and if the sand had a tiresome way of crumb-

ling rather too fast, that could not be helped, of course.

Further and further the passage lengthened out; and the martin's little head was busy with sweet fancies of eggs and nestlings, when a strange stifling feeling stole over her, and in another minute the sand, that had from time to time pattered upon her body, was falling in heavy showers all around, threatening to bury the worker in the ruins.

Choking and terrified, she fought her way to the surface, more than half determined that the first effort at boring should be the last.

But instinct was too strong; and before long the martin and her mate, as they sunned their mouse-coloured coats side by side on a bramble spray, were once more laying their heads together as to nest-making.

'If only we dared try higher up the cliff,' they sighed; 'it is hopeless to work in that awful sand again.'

Far above their heads, the sandstone was now pierced with dozens of new holes, and as the busy workers flew in and out, the sight of some carrying feathers and grasses for the nursery at the end of the passage sent a thrill to the mother-heart, and nerved her to greater efforts. A short upward flight, and tap, tap, Hirundo's beak was pecking at the hard sandstone.

After all it was not so very difficult; and all went well until one morning, when a gentle upward slope of a foot or more had been scooped out, the sand-martin crept back to the mouth of her hole with drooping wings, to await the return of her mate, hawking backwards and forwards in the sunshine in quest of flies.

'It is no use,' she moaned; 'there is a great hard stone in the way! Don't you remember hearing that is the reason why there are so many unfinished holes about? I knew from the beginning it was too difficult a task for us.'

For a day or two the pair fluttered about the place in great distress, without attempting further work. Now and again a neighbour would peep in, peck at the stone and give an opinion: some advising her to desert the tunnel at once as hopeless, and others saying that perseverance must in time win the day.

'In trouble, eh, my dears?' chirped a friendly voice. 'Ah, I see, just my own case over again. Now, if you will allow me, I will show you how I got round the difficulty.'

The old martin did literally carry out his promise: with some pecking and scraping, a curve was given to the passage, so that the workers might miss the hard place, and carry on their labours in a slightly different direction; and henceforward, during the finishing of the tunnel and hollowing out of a rather larger chamber at the end, the pair met with no further difficulties.

And now the little hearts of the two martins, joyful as they were over the finished task, were filled with shame for their former laziness and fear.

'We might have known,' cried they, gazing with tender pride at the four tiny pinky-white eggs, lying together on the simple nest, 'indeed we ought to have known, that nothing but the best could satisfy us for our darlings. What a mercy the first burrow

fell in before the helpless little ones were there! We might have been all smothered together!’

And all through the season, from the day at the end of June, when the fledglings first ventured from the nest, to the time when they left it finally to seek their own fortunes, and the same process was repeated with the August brood, the sand-martins grew more and more thankful that, having the best within their reach, they had not been content with something lower.

‘And our labour will last,’ cried they, as they chased each other merrily here and there, seemingly practising for the long, long flight that must be taken that Michaelmas-tide. ‘And when we return next spring, what happiness to find our own little home standing open to welcome us back.’

L. M. STURGESS.

A STRANGE WAY OF PAYING RENT.



THE Law Courts, London, the following quaint ceremonial takes place every year before the King's Remembrancer.

First of all, two warrants are read, one calling upon the past Sheriffs of the City of London to render to the Crown an account of the issues of their office for one whole year, and the other appointing the Secondary and the Under-Sheriff to tender such account in the names of the

Sheriffs. Proclamation is then made: ‘Oyez, oyez! tenants and occupiers of a piece of waste land, called the Moors, in the county of Salop, come forth and do your service.’

The City Solicitor steps forward and puts a faggot of twigs on a block of wood, cutting it with a hatchet; then he produces a second faggot, which he cuts with a billhook.

Again proclamation is made: ‘Oyez, oyez, oyez! Tenants and occupiers of a certain tenement, called the Forge, in the parish of St. Clement Danes, in the county of Middlesex, come forth and do your service.’

In reply, the City Solicitor comes forward again with six horseshoes and a bag of nails, counting out upon the table the six horseshoes and sixty-one nails. The nails he puts in little heaps of ten, and when he has counted six heaps he adds one more nail, making sixty-one in all. After the horseshoes and nails are counted, the King's Remembrancer says, ‘Good number.’

At the conclusion of the ceremony the City Solicitor asks: ‘Has his Majesty any orders with regard to these implements?’ And the King's Remembrancer replies, ‘I will take them to be at the disposal of his Majesty.’ Whereupon the nice bright new billhook and hatchet are handed up to the Bench.

The custom has been in use continuously for more than six hundred years. It is known that in

the thirteenth century one Walter Le Brun, a farrier, held a forge in St. Clement Danes parish on his paying to the Crown six horseshoes and sixty-one nails; and it is also known that at some remote period a piece of land was held in the county of Salop by one Nicholas de Mora, who had to cut two faggots yearly, one with a hatchet, the other with a billhook, in the presence of the King. But where the forge or the piece of land was situated, no one now knows.

NATURE AT HOME.

Some Every-day Habits of the Animal World.

I.—MIGRATIONS.



FOR, lo, the winter is past, the rain is over and gone; . . . the time of the singing of the birds is come, and the voice of the turtle is heard in our land.’

In these few words did the writer in the pages of the Scriptures vividly express the joy which mankind everywhere feels at the return of spring, and the prospect of the glorious days of summer.

A poet, and therefore a lover of nature, he was also a bird-lover; and he found, as we do to-day, something strangely soothing and delicious in the soft cooing of the turtle-dove as it nestled among the branches of the trees, gently swayed by the soft south wind.

But those of us who are fortunate enough to live in the British Islands look rather to the cuckoo and the swallow as the heralds of spring—so much so that many of us forget that they are but two of a host of birds which come to us year by year as regularly as the spring itself: a host which comes silently in the night, and, after spending the summer with us, as silently steals away, some members of it



Storks gathering for Migration.

before the summer has even ended, others not until chill October has well spent itself. The cuckoo and the swift are the last to come, and they are the first to go. The swallow is one of our first arrivals, and he is the last to leave us.

Those who have eyes and ears for the cuckoo and the swallow only, miss, as we have remarked, that larger body of our summer visitors, and similarly they miss much in the matter of bird-life that would compensate for the loss of these charming companions of the summer months. But those whose love of nature and of bird-life is of a deeper kind, in speeding our departing guests, find new gladness in welcoming a large number of visitors who purpose spending the winter with us—birds such as the redwing and the fieldfare, snow-buntings and bramble-finches, the woodcock and the short-eared owl, to say nothing of small armies of birds, such as larks and thrushes, golden-crested wrens and hooded crows, and many more—birds which come to swell the ranks of our resident population.

But what can be the meaning of this coming and going? Whence have they come, and whither do they go? These are questions that have puzzled the wisest of us during the last thousand years or so. **To-day** we begin to see dimly something of the forces behind these strange appearances and disappearances, and this because scientific men have set themselves the task of carefully studying every

detail that can be gathered about the subject. This study is called the study of 'migration.'

It is, of course, common knowledge that the birds which come to us in the spring come in all confidence to nest with us—a confidence which is but too often most shamefully abused; while those that come in the autumn do so to avoid the more rigorous winter which they would have to face if they stayed in the land from which they came.

As to the routes they travel, and as to the places where our summer birds pass the winter, we have yet much to learn, but much has been gathered on this head.

Take the swallow, for instance. This bird is to be met with during the summer months not only throughout Great Britain, but also all over the continent of Europe. At the approach of winter, however, they speed southwards, keeping, it is to be noted, as direct a course as is possible. Thus, the birds which have spent the summer with us slowly make their way to the south of England, congregating in vast flocks for some days, and finally, in the silence of the night, they cross the English Channel, and speed their way down the west coast of France, and so across sunny Spain and the Straits of Gibraltar into Africa. Thence they pass southwards down the west coast, where the winter is spent. The swallows of Central Europe similarly wend their way southwards to winter along

the east coast of Africa, some travelling downwards as far as the Cape.

And what is true of our swallows appears also to be true of most of our summer visitors. Holland, Denmark, and parts of North Germany are annually the centres of still more striking migration scenes. For here the beautiful white storks assemble in thousands before taking their journey southwards. And a stirring picture they make, enlivened by the strange noise they make by rapidly clashing the jaws together, while at the same time the head is thrown backwards towards the tail.

Delightful as this power of avoiding grey skies and bleak winds appears to be, it is, however, attended with many perils. For, of the smaller birds, thousands fall out by the way, some into the hungry sea, and some into the hands of man, often the most merciless and cruel of all the enemies with which the poor defenceless creatures have to contend. Some are caught to be eaten by gourmands, and some to have their poor bodies mangled out of all semblance to their real shape to serve as 'ornaments' to deck the hats of thoughtless women.

Perhaps the most marvellous feature of these wonderful journeys is the unerring instinct which guides these wanderers. For year after year the same pair of swallows will return to the same spot, rebuilding or repairing last year's nest; year after year they will depart, and with the same certainty will make for the chosen spot wherein the winter shall be spent. But what is still more wonderful is the fact that the young and old birds travel in separate bands, the old birds leaving some days earlier than the young! How do these, then, find their way over a route which they have never travelled before, to a country they have never seen? But of such marvels of travel nature can furnish many instances, and some of these we propose to consider in our next chapter.

W. P. PYCRAFT, F.Z.S., A.L.S.

(Continued on page 275.)

THE STORY OF THE APPLE-TREE.

NOBODY would expect a boy or girl, when heartily enjoying a nice ripe apple, to think about the long history of this favourite fruit. Probably, next to the grape, the most famous of all the fruits is the apple: for ages beyond reckoning, it has been known to be both pleasant and wholesome. The Bible mentions the apple five times, but the tree does not grow well in Palestine, so it seems likely the word translated 'apple' should be 'citron,' also a favourite Eastern fruit. Homer mentions apples, it is supposed, but it is not easy to tell what many ancient names of this kind mean; certainly the fruit was familiar to and valued by the Greeks at a later time. Greece was famous for its apples, and those grown in the island of Eubœa were particularly choice. Philip, King of Macedon, and his son, Alexander the Great, were so fond of apples that a dish of them was always put upon their dinner-table, we are told. At Athenian wedding feasts, while Solon was lawgiver, a rare and expensive apple was handed round to the guests, but he forbade any person to eat two, except

the bridegroom. Later on, the Romans, conquerors of the world, collected from the countries they visited all sorts of valuable fruits, and got many varieties of the apple. Orchards were numerous all over Italy in the time of the Emperors.

We have in Britain a wild apple called the crab, which shows us pretty pink and white flowers, producing small and very sour fruits. At one time, cottagers used to squeeze crab-apples, and the juice, known as 'verjuice,' was a remedy for burns and similar injuries. Some time before the Romans came to England, shoots of good apples had been brought from the Continent to Somersetshire. It is said that this tree was regarded with great reverence by the old Druids, because they thought the sacred mistletoe would only grow upon the apple and the oak. Honour was given to the ancient bards of Wales by crowning them with an apple-spray. No doubt, William the Conqueror and his Normans brought over several sorts of new apples. The first named in history is the pearmain, referred to when King John reigned. Another old apple was the costard: it is thought the costermongers (costard-mongers), the street sellers of fruits and vegetables, were named from this apple, sold in old London as early as the time of the first Edward. Henry VIII. made it felony to cut the bark of an apple-tree. Several writers of Tudor days mention the practice of eating pippins with cheese; they spelt the word 'pepping' at first. The golden pippin, famous as a Sussex apple, was so liked by foreigners that some were grown to send abroad. Catherine, Empress of Russia, much liked this apple, and had a supply of them for her table, each wrapped up carefully in silver paper to travel. By order of Charles I., the ambassador in France collected large numbers of young apple-trees, which were sent to England. A great many of these were planted about Herefordshire, so that it became a popular saying that the county was like one large orchard. Cider, made by fermenting the juice of apples, was a much commoner drink formerly than it is now, especially in the eighteenth century.

We often hear people speak of pomades, and plenty of them are advertised in the newspapers. The name is connected with *poma*, the Latin for apple. Gerard says in his 'Herbal,' that a preparation for the hair was made from the pulp of apples, beaten up, mixed with lard and rose-water.

Some old books mention a drink oddly called 'lamb's wool' by the English, which has nothing to do either with lambs or wool. It was taken on several Church festivals, especially on Lammass Day. Vallancey says the name was *La-mas-ubval*, at first, and it seems to have been rather like the Christmas wassail bowl. Apples were put on a string, and roasted before the fire; then they were placed in a bowl of spiced liquor.

Though in these days we have many sorts of pastry, the old-fashioned apple dumpling is still a favourite. Formerly it was thought much more of, and the famous Coleridge said that a person cannot be a bad character if he is fond of dumplings. One method of cooking them was to put a piece of pork or bacon inside with the apple, so that the dumpling made a good dinner by itself.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 235.)

O'BRIEN went first, feeling his way by the wall till all rays from the entrance had vanished. Then he struck a match. The place was more like some tunnel constructed by an engineer than a natural cavern, so correctly was it formed.

When the match went out, Teddy looked back through the darkness. He could see a point of light away in the distance; it looked about the size of a threepenny-bit. It was the entrance to the cave.

'We have come a good way,' said he to Marley, 'but I was a fool to strike that match, for if I can see the entrance from here, they would have seen our light. Let us wait a moment and watch.'

They had not waited long before a shout came echoing along the cavern, and a tiny black form appeared at the entrance.

The boys did not wait to see more, but pursued their way as swiftly as they could through the darkness.

After they had gone a few hundred yards they stopped, turned round, and listened. The tunnel must have taken a bend, for the entrance light had vanished completely, and all around them lay absolute darkness and utter silence.

'These Spaniards are such cowards,' said O'Brien, 'that probably they would funk coming into the cave unless they had torches; but come along, I'm pretty sure this tunnel leads somewhere, and anywhere is better than going back.'

After five minutes or so more they paused to strike another match. The darkness and the terrible silence weighed on their spirits, but the light of the match showed them something more depressing than even the darkness. The cavern was growing narrower, smaller, contracting in every way, and becoming, in fact, a mere narrow tunnel.

'Here's a go!' said Teddy. 'Those villains have us in a trap. Listen!'

A faint sound of voices came to their ears, very faint and far away, but none the less terrifying for that.

'Let's go on as far as we can,' said Marley. 'It's our only chance now.'

O'Brien struck another match, and they proceeded, but not for far. The tunnel suddenly came to an end except for an opening some four feet square at its lower part, an opening that looked like an old water-channel.

The voices behind them were now louder, whooping and shouting, no doubt to encourage one another. Alonez's crowd were advancing with the noise and ferocity of a pack of hounds.

'There's nothing for us but to try to get through that hole,' said Teddy. 'It's awful, but we shall have to make the attempt. I'll go first; don't you follow till I cry out.'

Without stopping to think about the matter, he went down flat on the floor and wriggled himself into the hole; there was just room for him to use his elbows slightly as a means of progression.

Marley, standing by, holding a lighted match, saw

him vanish, and just as his feet disappeared the match went out.

Almost immediately came his voice: 'Right you are, Dick, come through: it's only a few feet long, and there is a cave this side.'

The words came not a moment too soon. A dull light lit up the tunnel behind Marley, a shout rang in his ears. He cast himself on the floor and literally plunged into the hole.

Just as his feet were disappearing, a hand seized him by the left foot. But it only had time to grasp his instep, and with a frantic effort he freed himself, leaving his shoe behind. Then he felt O'Brien pulling at his shoulders, and the next moment he was standing erect and breathing freely.

'Don't say a word,' whispered Teddy. 'If any of them come after us, we can deal with them one by one. Watch!'

A light came through the hole—evidently the pursuers had a torch of some kind—and a murmur of voices came also.

Then the light vanished.

'Wait,' whispered Teddy.

They heard some one trying the opening.

Teddy suddenly struck a match. Diego's face was just protruding from the opening.

Teddy flopped down and applied the lighted match to Diego's nose.

A loud yell filled the cavern and echoed away along the roof, and the face vanished.

'I don't think any of the rest of them will risk it,' said O'Brien, grimly. 'Now, don't let's stop any longer; come, lend a hand.'

There was a heavy boulder near the opening, and O'Brien, using all his strength, rolled it against the hole.

'Ten men couldn't push it away from the other side,' said he. 'I think that has effectually bottled them up; not that they want bottling, for they would never try to squeeze through after what Diego got. Come along.'

The cavern they were now in was just the same as the cavern they had left—a tunnel whose walls glittered with some unknown form of crystal.

Suddenly O'Brien, who was leading, gave a shout of joy. A faint spot of violet-coloured light appeared in the darkness away before them.

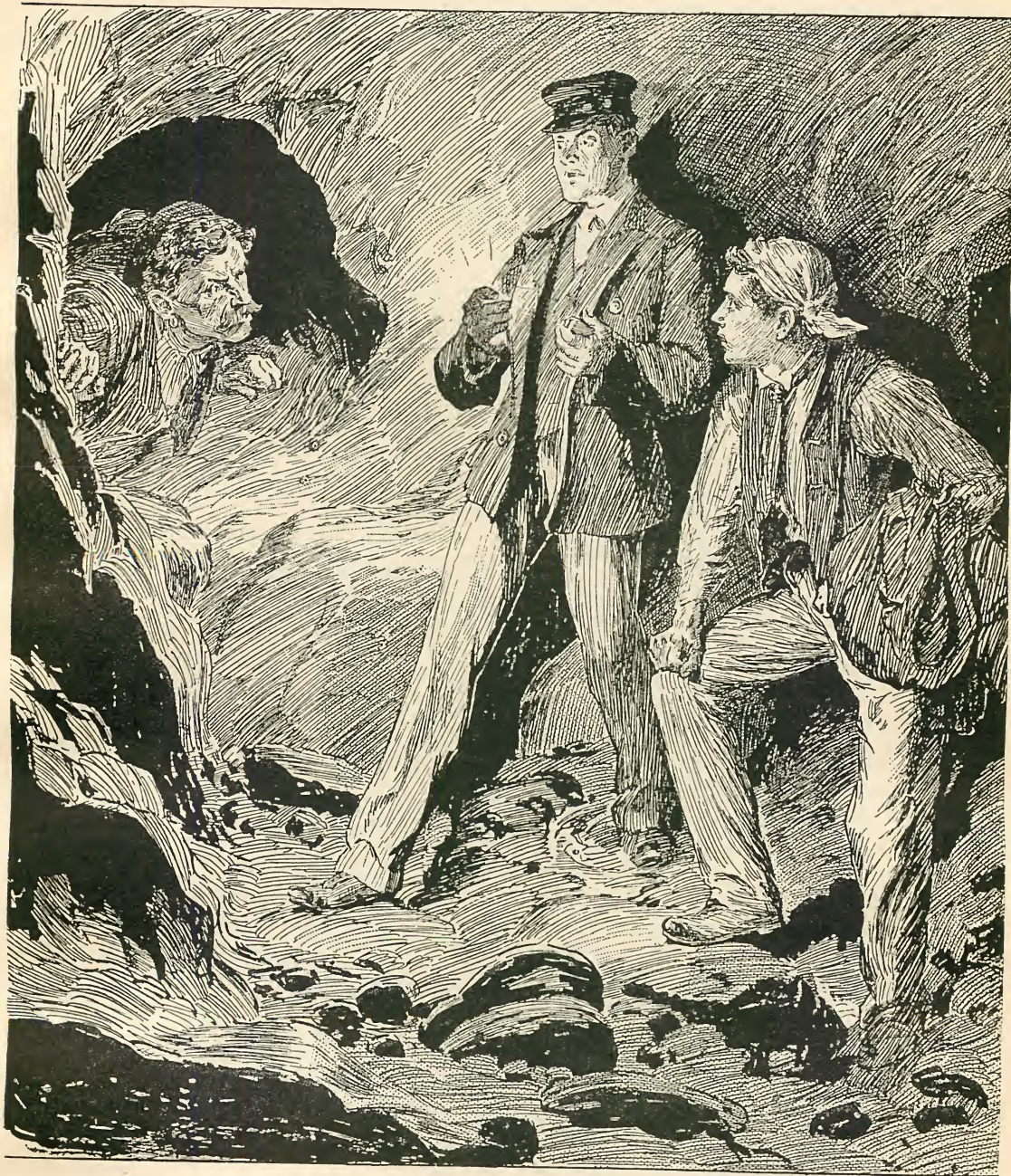
No star could be more beautiful than this dim glimmer, that spoke of open air and sunlight, freedom and life. As they advanced towards it, it became larger and less vague, and at last resolved itself into a cave-mouth veiled by long, trailing creepers.

They broke through this veil, and found themselves in a very strange place. It was evidently the crater of an extinct volcano. Above, cliffs with razor-like edges cut the sky; below lay a cup-shaped valley clothed with greenery, in the centre of which stood a hut.

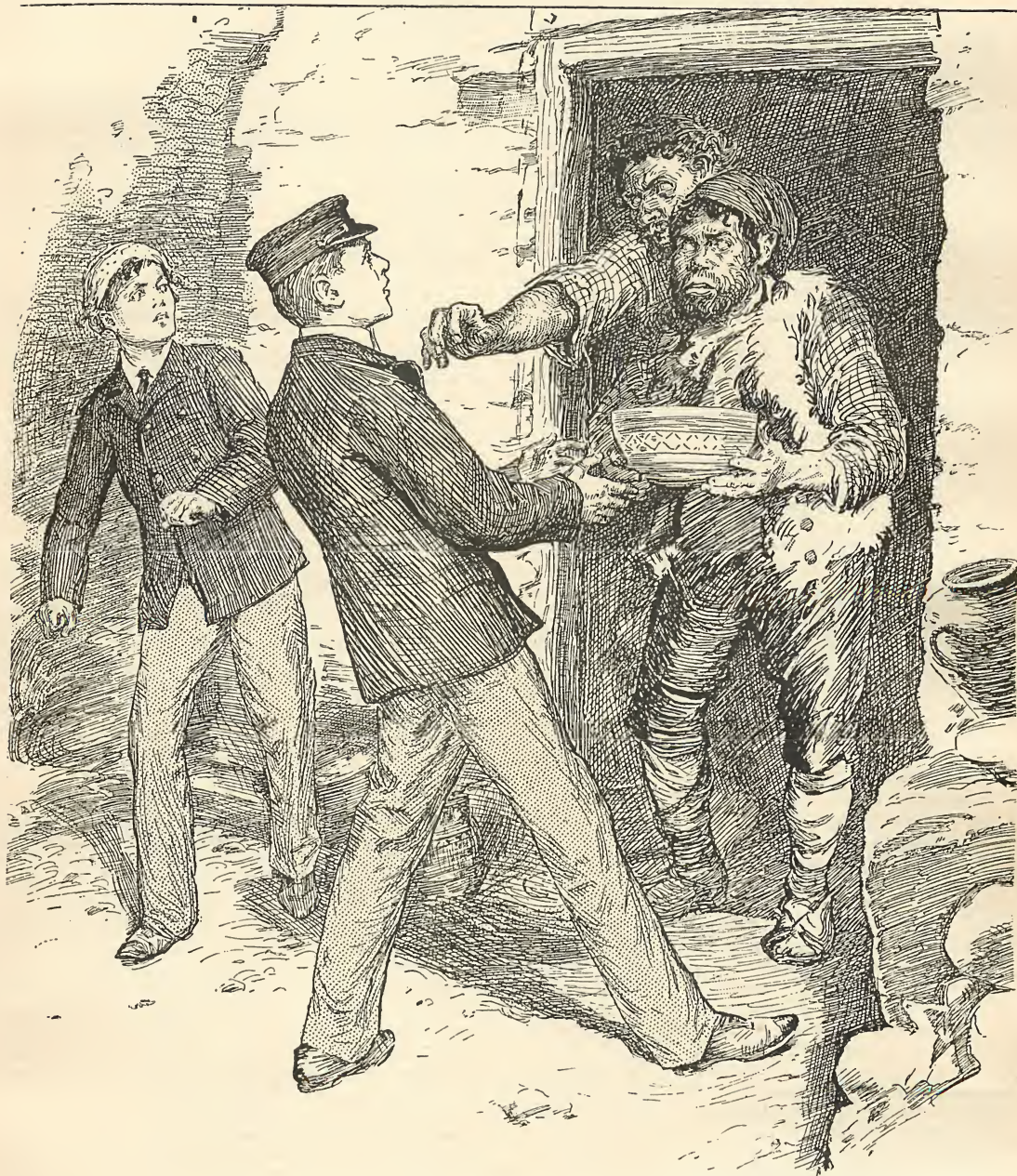
To the east, a break in the old volcano-wall gave an exit from the valley.

There was something peaceful and summer-like about this hidden valley in the hills, but there was something sinister too. The place had somewhat the appearance of a trap.

(Continued on page 250.)



“Teddy suddenly struck a match.”



"A hand shot out."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 247.)

CHAPTER XXII.—THE TWO BLIND MEN.

'THANK goodness!' said Marley, taking a deep breath of the pure, fresh air.

'Ay! you may well say that,' replied O'Brien, casting his eyes over the scene before him and then up at the cliffs; 'and they won't catch us here from their side of the island, for no man could come down those cliffs. Dick, did you ever see cliffs so black, and clean, and horrid-looking as those? This must have been the inside of a volcano once, filled with bubbling lava. I don't know why, but it makes me feel creepy.'

'Well, so it does me. But let's try and get down to that cottage; maybe they can sell us some milk and tell us the way to get out of this. I'm as dry as tinder.'

'Come on,' said the other, and they started.

It was an easy enough descent through long grass, amidst which goats grazed, and at last they found themselves on the floor of the crater, and within a few hundred yards of the hut.

'Hold on a second,' said Marley, suddenly coming to a halt. 'What are you going to say to the people here—if there are any people here?'

'I don't know yet,' said O'Brien. 'I can get glimpses of the sea through that gorge in the cliffs over there. But, come on, the place seems deserted.'

They approached the door of the cabin and knocked. There was no answer. They knocked again, and then waited, listening intently for any sound from within.

'The place is deserted,' said Marley. 'Would it be any use to try and burst the door in? It looks rickety enough.'

'Hist!' said Teddy, holding up his finger. 'Listen.'

A faint whispering sound was now audible; it came from the interior of the hut. The tones of two voices could be made out.

'Oh, bother!' said Teddy. 'What do they want to keep us here all day for? Hi, there, open! We are not thieves.'

He struck the rotten old planks of the door with his knuckle as he spoke, and at the touch of his finger, as if some magic charm had suddenly acted, the door flew open, and a man stood before them. A most extraordinary and evil-looking man it was; enormously broad of shoulder and powerfully built, with long snaky black locks of hair, that hung like vines about his face, and eyes without any colour—dead-white eyes. The man was blind: some form of trachoma had ruined his sight, and left his eyes all the same china-white hue. As he stood in the doorway another face appeared over his shoulder, the face of another man, also blind, and with eyes of the same dead-white colour.

'What do you want?' asked the first man, in Spanish.

'Milk,' replied O'Brien, 'and some bread.'

'How many of you are there?' inquired the blind man.

'Two.'

'Where do you come from, and what are you?'

'We are two English boys. We have lost our way. We have money, and can pay for the milk.'

'Come in,' said the blind man.

O'Brien and Marley felt that they would much rather enter a tiger's den than this hut, with its terrible-looking occupants. There was something in each of the men's faces repellent and terrible to a degree.

'Many thanks,' said O'Brien, 'we do not wish to enter. If you give us the milk we will drink it here.'

'Let me hear your money speak,' said the blind man. 'Rattle some coins together. You see we are blind, and do not wish to be deceived.'

Teddy took out the little bag of sovereigns and clinked it. Then the two men retreated into the darkness of the hut. In a minute they were back, the first carrying a bowl of milk.

'Here,' said he, 'is your milk.'

Teddy was in the act of taking it from the man when a hand shot out and all but grasped him by the coat.

'Look out, Dick!' he cried, springing back, 'they're up to mischief.'

He retreated with Marley to a boulder some dozen yards off.

'Sit down,' he whispered. 'They can't see us, and if we don't make a noise, they can't hear us.'

The two terrible creatures stood a moment at the door, and then vanished into the hut.

'Come,' said Teddy, 'I'm off. Let's make for the sea; this path will lead us. I want to get a hundred miles from those chaps as quickly as possible.'

'So do I,' replied the other.

They took the path that led to the gorge, walking swiftly.

'If they had nailed me, I'd have been done for, I'm pretty sure of that,' said Teddy. 'It was the clink of the gold—ugh!'

'I would sooner face Alonéz's crowd than that pair,' said Marley; 'it was the one behind that tried to grab you over the other chap's shoulder as he was giving you the milk.'

Passing through the gorge, which was simply a rent or crack in the old volcano wall, they came suddenly upon one of the quaintest and most delightful little bays in the world. It was very narrow between the high volcanic cliffs and very blue; the water washed in over a beach of dazzling white sand, sand literally as white as snow. Beached on the sand lay a broad light boat, such as the fishermen use amongst the islands.

'Well, if we aren't in luck at last!' cried Teddy. 'A boat! The very thing we wanted to get away from this island in.'

The words had scarcely left his mouth when, from the gorge, sounded the clatter of feet, and the two blind men came running in pursuit just as swiftly as if they had possessed eyesight.

And they had eyesight in a way. They were being led by a child—an elfish-looking child, with long black hair. The whole three of them were running hand-in-hand, the child leading the way. The blind men were armed, one with a great stone maize-pestle and the other with an axe.

The boat on the beach was fortunately light, and only a foot or two from the water's edge, and in half a minute more she was afloat. There were oars in her, fortunately, so that in half a minute

more she was many yards from the beach, where the two blind men were shouting and gesticulating, whilst the child chattered like a monkey, explaining, no doubt, the position of things, and how the boat had been taken.

'What's that they are shouting?' asked Marley.

'I can't make it all out,' said O'Brien; 'but I can hear the word "robbers."'

(Continued on page 259.)

PUZZLERS FOR WISE HEADS.

13.—TWO SHORT PUZZLES.

(A.)—A word of five letters, signifying something that is common, useful, and beautiful. Find in it (a) the name of a tree, (b) an article of dress, (c) something for your front garden, (d) a mark in the ground, (e) the neuter gender, (f) that which is suitable.

(B.)—A word of five letters signifying that which is boundless, melancholy, and often dangerous. Find in it (a) a geometrical shape, (b) a sweet and juicy plant, (c) a sort of boat, (d) a receptacle for eatables and drinks.

C. J. B.

[Answers on page 283.]

ANSWERS TO PUZZLES ON PAGE 211.

11.—Westmoreland.

12.—1.	C R O P	2. C H A T	3. B R A G
	R I P E	H A L E	R I L L
	O P E N	A L A S	A L O E
	P E N T	T E S T	G L E E

GARDENING ANTS.

THERE is a great difference between size and sense. An ant is much more sagacious than an ox, but the foot of an ox could cover hundreds of ants and crush them. Usually these small, active insects take good care to avoid being trodden upon, though sometimes they are so intent on what they are doing that they get into peril.

One thing notable about ants is their kindness to each other. We notice, too, how pleasantly they work together, and so accomplish great achievements. The employments of ants in all countries are varied; they find plenty to do in attending to their homes, building, foraging, feeding the young, and occasionally in fighting their neighbours.

In warmer countries than ours, ants are found whose habits have led people to call them gardeners, though whether these ants are also discerning enough on a hot day to carry along a big leaf over a party as a handy sunshade may be doubted. There is a North American ant which year by year stores up in its anthills the seeds of a particular grain (a sort of rice), and takes care to watch and guard its growth and to gather the crop just at the right moment. One naturalist, indeed, declares that the ants sow the seeds at the time suitable; but about this we have no clear proof, though it is possible, and certainly the fact is singular that the plants are to be seen growing on a patch of ground near the anthill. Of course this grain may come up every year from seeds that have dropped. That the ants well watch the crop, and remove all weeds which might check its growth,

has been observed by many persons who have testified to the care with which they harvest it when ripe. Should the seeds fail to dry properly in their granary, the ants bring them out again into the open air.

Elsewhere, mostly in hotter parts of America, swarms of ants exist which are noted as leaf-cutters, and some seasons they nearly strip the plantations of orange and mango trees. By the aid of their sharp jaws, they cut out pieces of leaf about the size of a sixpence, which they carry off to their homes. Usually their hills are low mounds, from which they remove all weeds which might keep off the air. But the ants do not take these leaves in order to eat them. The leaves are cut up smaller, and upon them, when put underground, grow large quantities of a tiny fungus—a sort of mushroom, in fact. They serve for food to the ants, and the young ones too.

J. R. S. C.

A USEFUL EARTHQUAKE.

Founded on Fact.

MANY years ago an American, accompanied by his son, a lad of twelve, spent some months in the hills in a wild part of South America, the father being convinced that silver existed somewhere in the neighbourhood, though long weeks of prospecting failed to locate it.

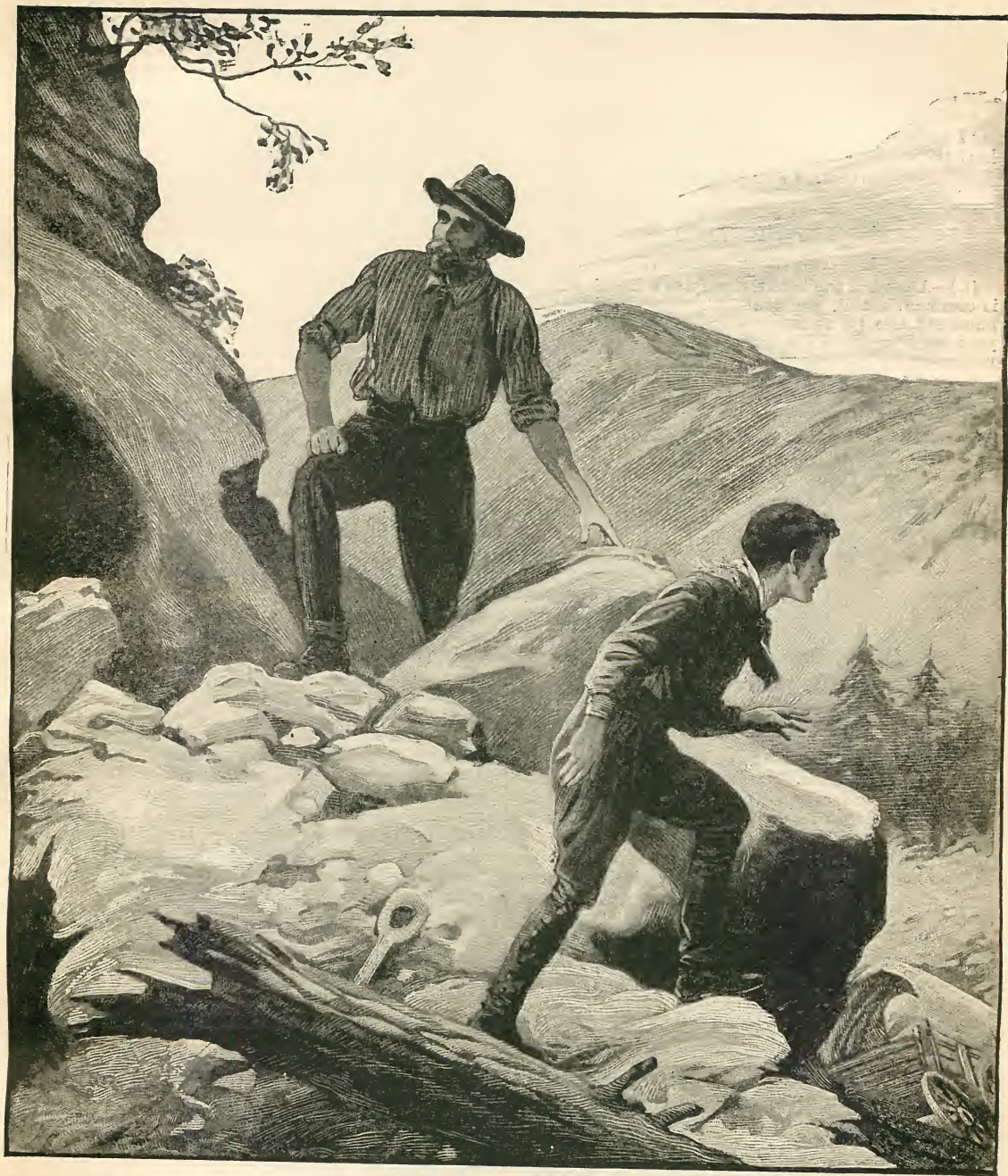
Father and son encamped in a cave in the hills, the nearest habitation being some ten miles away. All their spare time was taken up in digging in likely places in search of traces of silver ore.

One night an earthquake shook the hill; the lad lay in his blanket listening to the stones rolling down the cliffs and falling in a rain of pebbles and bits of rock on the ledge at the entrance to their cave. Presently a great mass of rock came thundering down, which fell full on the ledge, entirely blocking up the cave's mouth. This disturbance aroused the lad's father, and together they lay listening for a time to the convulsions of nature around them. It was over in a short time, when they set to work to dislodge the rock that imprisoned them.

By daybreak they had forced a passage through, and were out in the open air again, but a woeful sight met their gaze. Their waggon, at the foot of the hill, had been broken to pieces; their tools had been smashed, and the steps they had dug out in the rock to reach the cave were displaced or covered with refuse.

The lad was in distress at the sight, but his father said, 'Never mind, Jack. Let's begin all over again. Run out across the valley, and fetch an armful of bracken; we will have a fire first and a good meal.'

Jack obediently set out, at first reluctantly, but soon he felt his spirits returning. All at once, while dashing through thick bracken, he stumbled and fell. His foot had caught in some obstruction, and he crawled back to reconnoitre. He saw he had stumbled over a deep fissure that ran along the ground, caused, doubtless, by the earthquake; a narrow opening, but one that widened as it went along; and as he drew aside the dead bracken, and peered curiously down, he caught a glint of shining metal in the depths.



"Their waggon, at the foot of the hill, had been broken to pieces."

Limping on his bruised foot he made his way back to the hill to call his father. The man made haste to the spot, tore away the herbage, and fell on all-fours to inspect the curious rent in the ground. A long time he lay prone, and when eventually he rose up

his face was pale, and he was trembling with glad excitement.

'It's all right, Jack, my lad,' he said. 'The vein of metal that runs all along is thick and plentiful, and is—real silver!'



“ ‘Will you kindly explain, Anderson?’ ”

IN SCHOOL AND OUT.

IV.—GHOSTLY VISITORS.

BY the time that Anderson Minor had been a year at Canbury he had settled down into what his brother considered to be a ‘very decent’

member of society. He and his chum, Meredith, were as fond of ‘larks’ as ever, but they had also made their way to the top of their class; and Anderson Major, who was working his hardest for an Oxford scholarship, felt that his brother could now get on without his supervision.

The term after the King paid his visit to Canbury, Dr. Meredith's kitchen chimney collapsed, and he found that his house, which was a very old one, was in such a bad state of repair that he decided to go into lodgings himself, and send his son as a boarder to the Grammar School while it was being done up. The boarding-house was very full that term—there was already an extra boy in Anderson Minor's dormitory—and it was decided to turn a room, known as the 'ironing-room,' into a temporary bedroom, and put Meredith and Anderson Minor into it.

Along one end of this room ran wide shelves, upon which, amongst other things, lay neatly-folded piles of best clothes and Eton suits, for the matron, a young and energetic hospital nurse, prided herself very much on the neat appearance of the junior boarders on Sunday. On week-days she owned, with a sigh, that she could not make them see that there was any harm in grubby suits and spotted collars. But the boy who did not keep his clothes neat and tidy on Sunday soon found out how very inconvenient it was to be in the matron's black books. No amount of energy could then extract from her hot lemonade in bed, and a cough that would have usually gained for its fortunate owner a large piece of her own patent 'cough toffee' was treated with a potash tabloid.

When Mr. Davidson told the two boys where they were to sleep, he added, 'Now, look here, boys, I'll have no monkey business with the clothes. Miss Mackenzie' (the matron) 'takes a great deal of trouble about them, and, though you might find it very amusing to see Clarke Major struggling to get into Clarke Minor's coat, you must remember that it is rather a mean thing to take a few minutes' amusement by giving another person several hours of extra and unnecessary work.'

So Anderson and Meredith felt that they were on their honour not to touch the clothes; but there were other things besides clothes kept on the shelves, and Miss Mackenzie smiled when she noticed the changes that were made on the labels of some of her boxes of odds-and-ends, and decided to remove them to safer quarters.

But from amongst the neat piles of hat-boxes beneath the shelves she had forgotten to remove one of her own, and, while the boys were investigating one night to find out whether it was really true that Wilkinson wore the same top-hat that his grandfather had worn at the school forty years before, they came upon the box she had forgotten.

It contained two white dominoes with black masks that Miss Mackenzie and a friend of hers had once worn when they had been in a little German town at carnival-time, and the boys proceeded to try them on. A domino is made like a long, loose dressing-gown, with very full sleeves and a hood, and it covers up its wearer completely, clothes and all. With it is worn a black silk mask to hide the face, and the appearance of a person so disguised is strange enough to startle the unwary.

As may be guessed, Anderson and Meredith were too pleased with their own ghostliness to wish to keep the fun to themselves, and in a little while a rumour arose that the Grammar School was haunted.

Nervous young servants declined to believe the cook when she declared that it was 'some of those boys up to their tricks again,' and, although the boarding-house was new and modern, people managed to remember or invent a ghost story that would fit it.

No suspicion whatever fell upon the two culprits for several weeks. They were very careful not to be out of their room for more than a few minutes every third night or so, and they were always able and willing to describe the appearance of the ghosts even more minutely than those who slept in the other dormitories. But gradually the two conspirators grew more daring, and at last, in a rash moment, they decided to invade the lower corridor where the bigger boys had their bedrooms and studies—and then misfortune overtook them.

They had no sooner turned into one of the passages leading from the staircase than Anderson received a slipper full in the chest, and a voice, which he recognised as his brother's, exclaimed, 'Just clear out of this, will you! You can frighten the upstairs kids as much as you like, but we won't have that nonsense down here.'

They turned and fled, and just as they reached the staircase they saw no less a person than Mr. Davidson himself at the far end of another passage.

They mounted the stairs three steps at a time, raced breathlessly along their own passage, and had shut themselves noiselessly into their own room before Mr. Davidson was half-way upstairs.

'Where shall we hide the things?' said Meredith, wildly, slipping out of his dress without undoing half the buttons. 'If Bony finds them, we are done for.'

'Let's hang them out of the window!' answered Anderson equally breathlessly. That very afternoon they had been amusing themselves by trying to sling small pebbles into the open window of the study beneath their room, and the two strings they had been using were still tied to nails on the window-sill.

The windows were always kept wide open, top and bottom, all night, by the Doctor's orders, as Anderson's chest was still rather weak, and with hasty fingers each boy tied the string round the neck of his garment, put the mask into the pocket, and slipped the whole thing out of the window. Before Mr. Davidson reached their room, which was the last in the passage, both boys were in bed and apparently fast asleep.

He had been into all the dormitories, only to find rows of sleepy boys. Nowhere was there any trace of a hurried scramble, or of mysterious garments lying about, and though he thought that some of the boys, especially Meredith, were snoring with a suspicious loudness, he could not prove that any of them had been out of bed. So, at last, he returned to his study, resolving to give out at 'call-over' the following morning that if the ghosts were seen again, the whole of the boys of the upper dormitories would do extra drill on the following Saturday afternoon.

He had been working in his study for some time, and the clock had just struck twelve, when he was startled by a rap at the front door. He went to

open it, and found a police inspector standing on the doorstep.

'What is it, Inspector?' he asked.

'It's the ghosts, sir, that I've come about,' answered the man.

'Ghosts!' echoed Mr. Davidson, wondering how the policeman knew of his adventure that night.

'Yes, sir. Your place is getting such a bad name that I thought it was about time we looked into the matter. So I have just been round at the back, and from there I saw something that I should just like you to come out and look at it yourself. Perhaps you will be able to explain it better than I can.'

The inspector and the head master went out together through the garden door, and as soon as they came in sight of the ironing-room windows, Mr. Davidson uttered a startled exclamation.

'It's all right, sir,' said the inspector encouragingly. 'It's nothing but clothes. They wouldn't blow about like that if there was anything inside them, and I guess it isn't ghosts either.'

A gale was blowing, and outside the windows of the ironing-room two strange figures were swaying to and fro. Sometimes the wind stretched them out straight, sometimes it filled them out like balloons, but in either case they looked equally weird and uncanny.

'We will go and investigate,' said the head master, and, followed by the inspector, he proceeded to the ironing-room for the second time that night.

Anderson and Meredith were now undoubtedly asleep, but Mr. Davidson soon aroused them, while the inspector went to the window and drew in the two dominoes.

'Will you kindly explain, Anderson?' said Mr. Davidson; and Anderson, seeing that further evasion was useless, *did* explain.

'We found the things in one of the hat-boxes, sir; and we—we thought it would be rather a lark to frighten the chaps a bit. Then, to-night, we knew you were after us, so we hung the things out of the window, so that you shouldn't find them if you suspected us. Then we thought perhaps you would have another look round when you came up to bed, so we left the things there till the morning.'

'I should have thought you two were above such a cowardly trick as scaring women and small boys,' said Mr. Davidson; and the two boys looked ashamed of themselves. They had not thought of the matter in that light before.

'Well, now, I suppose I must take you off to the police station for disturbing the peace of the neighbourhood,' said the inspector, coming forward. 'Where are your clothes?'

The boys looked appealingly at Mr. Davidson, and both men began to laugh.

'Well, well, boys!' said Mr. Davidson, 'you shall be let off this once with nothing worse than the usual punishment for being out of your room after 'lights out!' but, understand, there is to be no more ghost-walking.'

He went out, carrying the garments under his arm, and from that night the ghosts ceased to trouble the residents of the Grammar School.

A. KATHARINE PARKES.

'LETTING OUT ITS TUCKS.'

ON several occasions little Annie had watched her mother as she lengthened her children's dresses by letting out the tucks. One morning the child came into the house with a caterpillar rolled up into a ball.

'Put it outside, dear,' said her mother.

Annie placed the caterpillar on the window-sill, whereupon it stretched itself out, and began to crawl away.

'Oh, look, Mother!' exclaimed Annie, 'it is *letting out its tucks!*'

THE BREEZE AND THE BLOSSOM.

THE day had been hot, and the sun's scorching ray

Beat down on a blossom that grew by the way.
Its petals drooped sadly, and soon it must fade,
It was even too weary to hold up its head.

Now it chanced that a breeze came a-wandering along,
And it sang in its travels a low and sweet song;
So gentle it was that the blossom most weak
Had no fear of the kisses it left on its cheek.

'You poor little flower!' said the breeze low and sweet,

'I fear you are faint with the dust and the heat;
Just let me stay by you and fan you awhile,
I am sure to your face I can soon bring a smile.'

So the breeze by the blossom just lingered an hour,
And fanned, oh, so gently, the poor drooping flower;
And ere long it revived and gave forth a sweet scent,
And its stem it upraised that so sadly was bent.

And the breeze kissed it gently, then went on its way,

And the flower sank to sleep at the close of the day;
It dreamed of the breeze till the night hours had gone,
Then woke fresh and radiant and sweet with the dawn.

A BARBER'S WIT.

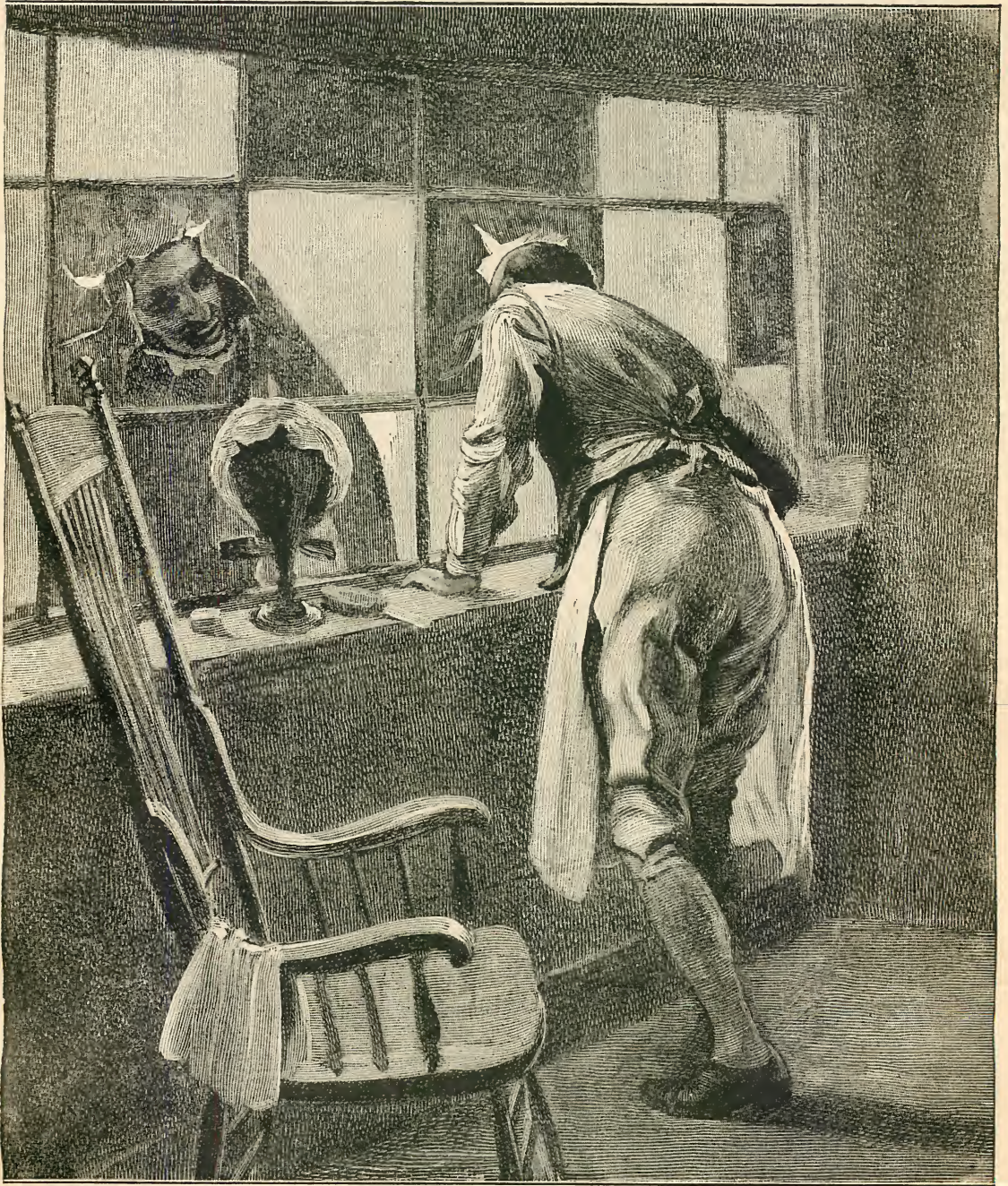
THE actor Foote dearly loved a joke. Passing one day along one of the streets of London, his glance fell upon a barber's shop which interested him. The barber had found some of the squares of the shop-window broken, and being, perhaps, too poor to pay for glass, he had mended them with sheets of paper, upon which he had written, 'Shave for a penny,' 'Walk in,' and similar notices. Upon the shop-door he had also written this doggerel:—

'Here lives Jemmie Wright:

Shaves almost as well as any man in England,
Almost—not quite.'

Foote concluded at once that the barber must be an eccentric man, and thought he would like to draw a little fun out of him. So the actor took off his hat, thrust his head through one of the panes of paper, and said, 'Is Jemmie Wright at home?'

The barber immediately put out his head through another pane, and replied, 'No, sir; he has just popped out!'



“‘Is Jemmie Wright at home?’—‘No, sir; he has just popped out.’”



THE LAST SURVIVORS.



"She asked if she might take the new light away with her."

INSTEAD OF THE SUN.

VIII.—COAL-GAS.



ABOUT the year 1730 some colliers who were working in a pit belonging to Sir James Lowther, near Whitehaven, met with an accident which gave them a great shock, though it did no serious injury. They had sunk the pit-shaft to a depth of about two hundred and fifty feet, and they began to think it was strange that they had not reached any flow of water, when they were suddenly surprised by a great rush of gas, which caught fire at their candles. It burned very fiercely, and produced a flame about six feet high and three feet in diameter. The men succeeded in beating out the flame with their caps, and then came up the shaft as quickly as they could. They told the manager of the works what had happened, and he went down the pit with them, and lighted the gas again, to see for himself what it was like. He even made the men dig into the coal from which the gas was rushing, and when he afterwards put a candle to it the flame was larger than before, and nothing but a jet of water would put it out. Eventually he caused a tube to be made from the bottom of the pit to the surface of the ground in order to carry off the gas. This tube stood up from the ground like a chimney-pot, and for two or three years, as Sir James Lowther told the members of the Royal Society, the gas came up in great quantities, so that it could be lighted at any time. Many bladders were filled with gas from this pipe and carried away, and when a little pipe was inserted in one of these bladders, the gas which it contained could be burned for the amusement of any one who had never seen anything of the sort before.

The gas which flowed from the coal in this Whitehaven mine was coal-gas, which was produced naturally in a way which we hardly understand as yet. At the present time the commonest light in use is that obtained from the same kind of coal-gas, artificially prepared and carefully purified.

The first man who prepared coal-gas from coal appears to have been a clergyman, the Rev. John Clayton, who made a number of experiments about the year 1738. The most important of these was that he heated some pieces of coal in a retort, or closed vessel, and found that it yielded a gas which would burn. This gas he collected in bladders. If I said that he boiled the coal in a kettle, and burned the gas at the spout, or filled his bladders at the spout, I might not be quite correct, but I should at least give you a very good idea of what he did. If any one cares to fill the bowl of a clay pipe with coal-dust, cover the mouth of the bowl with clay, and stick it in a hot fire, he will soon see coal-gas issuing

from the stem, where it may be readily and safely lighted.

But though the Rev. John Clayton had discovered how to make coal-gas, fifty years passed before any one turned to coal-gas as a means of lighting houses and streets. A Scotchman, named William Murdock, lighted his house and offices at Redruth, in Cornwall, with coal-gas in 1792, and a few years later he lighted the works of Messrs. Boulton and Watt, at Soho, near Birmingham. In 1805 Murdock made arrangements for lighting a large cotton-mill at Salford, and from that time coal-gas began to be used in many places. But for a long time many people had prejudices against the new light, and when Westminster Bridge was first lighted with gas, in 1813, the lamplighters refused, from fear or prejudice, to light the new lamps, and the Gas Company's engineer, Mr. Clegg, had to do the work himself for a few nights. Many people could not understand how the light was produced, and it seemed almost magical to them. One aristocratic lady saw a gas-lamp fixed to the counter of a London shop, and she was so charmed with the brilliance of the new light that she asked if she might buy it, and take it away with her in her carriage.

It is not difficult to understand how coal-gas is made. If we place a piece of coal on an open fire, it begins to smoke and puff out gas as soon as it is warmed. The gas and the smoke take fire, and the coal blazes, as we say. But if we heat the coal in a closed iron vessel or retort, so that the air cannot reach it, the gas will escape from the coal without taking fire, and it may be led away from the retort to any place where it is to be burned, or it may be stored in a large gasometer until it is wanted. As the gas passes from the retorts of the gas-house, where it is made, to the gasometers, where it is stored, it is purified by being passed through a large shower-bath and a room containing many trays of slaked lime. The water washes away some of the impurities, and the lime absorbs others.

When I was a boy I often stood by the side of workmen who were cutting and filing the various parts of machines and engines. Sometimes, in order to amuse me, a workman would take up a pinch of iron filings and throw them into the gaslight, where they made a glitter of golden sparks, reminding me of fireworks. Each particle of iron became, in fact, incandescent, like the lime in the limelight. I have learned since then that the gaslight itself is incandescent. If we hold anything which is clean over a gaslight, we shall find that it is quickly covered with fine soot. This is nothing more or less than an accumulation of little solid particles of carbon which have come out of the flame. The gas is made up of hydrogen and carbon, and when the hydrogen burns, the carbon is made incandescent by the heat, and gives out the light. As for the hydrogen, we have already learnt, in discussing the limelight (see page 163), that it burns with great heat but with scarcely any light; indeed, a distinguished chemist has said that, if the hydrogen is pure, and there is no dust in the air, the hydrogen flame cannot be seen at all, and can only be found by feeling for it.

W. A. ATKINSON.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 251.)

WHEN the two boys had cleared the little bay, they quite forgot the blind men and the child and everything else in the welcome sight that met their gaze. To south-eastward, floating on the blue water, not more than half a mile away, lay the *Kingfisher*. She had broken from the cable, evidently, and drifted, for they could see the broken end of the cable hanging from the bows; and she had apparently come round to this part of the island at the mercy of some current.

The boys set up a shout when they saw the good old ship. She seemed to have come of her own accord to help them. But after the first moment of exultation, Teddy looked grave. 'Can any of Alonez' lot be on board her?' he said. 'Or is she really deserted?' He shaded his eyes with his hand, and steadily gazed at the vessel, trying to pick out any moving form or sign of life. 'She's deserted, sure enough,' said he, 'for all the boats are gone, and I can't see a soul. Hullo! though, there is something moving on the roof of the chart-house. It's Sloper, by all that's good! Yes, she's deserted, sure enough, or old Sloper wouldn't be parading about like that; he would be hidden somewhere. Now, then, let's buck up and get on board—this may be the best day's work that either of us has ever done.'

The boat-stairs were still down on the port bow of the *Kingfisher*, so that boarding her was an easy matter. When they were within a hundred yards or so, Teddy, turning to get the direction, saw Sloper on the grating. The creature was still toggled out in his uniform, but the cocked hat had got awry, and gave him a most dissipated appearance. He was clinging to the companion-rope, and chattering and dancing up and down, evidently with delight.

A moment later the nose of the boat was crashing up against the grating, Marley was making fast, and Teddy was on the steps with the monkey on his shoulder. If ever a monkey talked, Sloper was talking then, almost as if he were trying to tell of his adventures whilst alone in command of the ship; his loneliness, and how glad he was to have company again.

'We will leave the boat fast to the grating, Dick,' said O'Brien. 'When I have time I'll stream her aft with a line. Come along. I say, isn't it fine to feel the good old ship under one again?'

They ran up the steps and gained the deck. Everything was in order. Save for a certain slackness in the rigging, a few ropes lying loose about the deck, and the un-holystoned appearance of the deck itself, she might have been in commission.

'This is great!' said Teddy. 'She isn't harmed a ha'p'orth. Marley, old man, our fortunes are made if we can only do what I want to do.'

'What's that?' asked Dick.

'You wait awhile and you'll find out; but come forward—I want to overhaul her.'

As they went forward he peeped into the little deck-house, that contained the steering-gear; the engine seemed intact and uninjured. He looked into the testing-room, with its thousands of pounds' worth of

valuable instruments; nothing apparently had been broken or disturbed. The vast picking-up gear, like a sleeping giant, lay only waiting to be roused to action.

When they had slaked their thirst with water from the scuttle-butt, Teddy climbed on to the bow-balks and looked over at the broken cable. It had parted about half a fathom from the water. He took his seat on the balks, whistled for a moment, and then said, 'Do you know what this ship's worth, Dick?'

'No,' said Marley. 'Must be a lot, though.'

'Have you got a paper and a bit of pencil?'

'I have.'

'Then fetch them out and write what I tell you.'

Marley took a little note-book out of his pocket.

'There's three hundred miles of new cable in the after-tank. That's worth six thousand pounds. Put it down.'

'Six thousand,' said Marley, entering the figures.

'There's two thousand pounds' worth of delicate instruments in the testing-room. Put that down. Rope and gear and buoys are worth another three thousand, and the ship as she stands, specially built and equipped, fifty thousand. Tot the lot up.'

'Sixty-one thousand pounds,' said Marley.

'I have put everything at the lowest figure. I haven't even counted the coal, and provisions, and stores, and glass and crockery ware, and goodness knows what all! The whole affair is worth seventy thousand pounds, if a penny. Have you got that into your intellect?'

'Yes,' said Marley, who did not in the least know what O'Brien was driving at.

'Well, then, get this fact on top of it. If we can get this ship into port, you and I, safe and sound, about a third of what she's worth will be paid to us for salvage.'

'Goodness!'

'Keep your feathers on. I say *if*; and it's a very big *if*—about the biggest if that was ever *iffed*—but there's the chance, my boy, a very dim chance; but if the wind were to spring up favourable for Teneriffe, we might get a topsail on her. I can disconnect the steam steering-gear, and we could steer with the big wheel near the after-gratings. Oh, if we only had a dozen arms and legs, we might fire up the main boilers and get steam on her! But that's hopeless. It all depends on the wind, and there's no wind from anywhere at present.' He looked at the cliffs of Gommara, so threateningly close. 'We are drifting on some current or other, and it's taking us clear of the island, thank goodness! We're going, I should say, one and a half or two knots. I wish I knew the set of the currents about here, but I don't. We must just trust to chance and wait for the wind.'

'If a storm were to spring up?' asked Marley.

'If a storm sprang up we should go to the bottom, I expect. What is it, Sloper?'

The monkey was running backwards and forwards, plucking now and then at O'Brien's coat as if to say, 'Come with me; I want to show you something.'

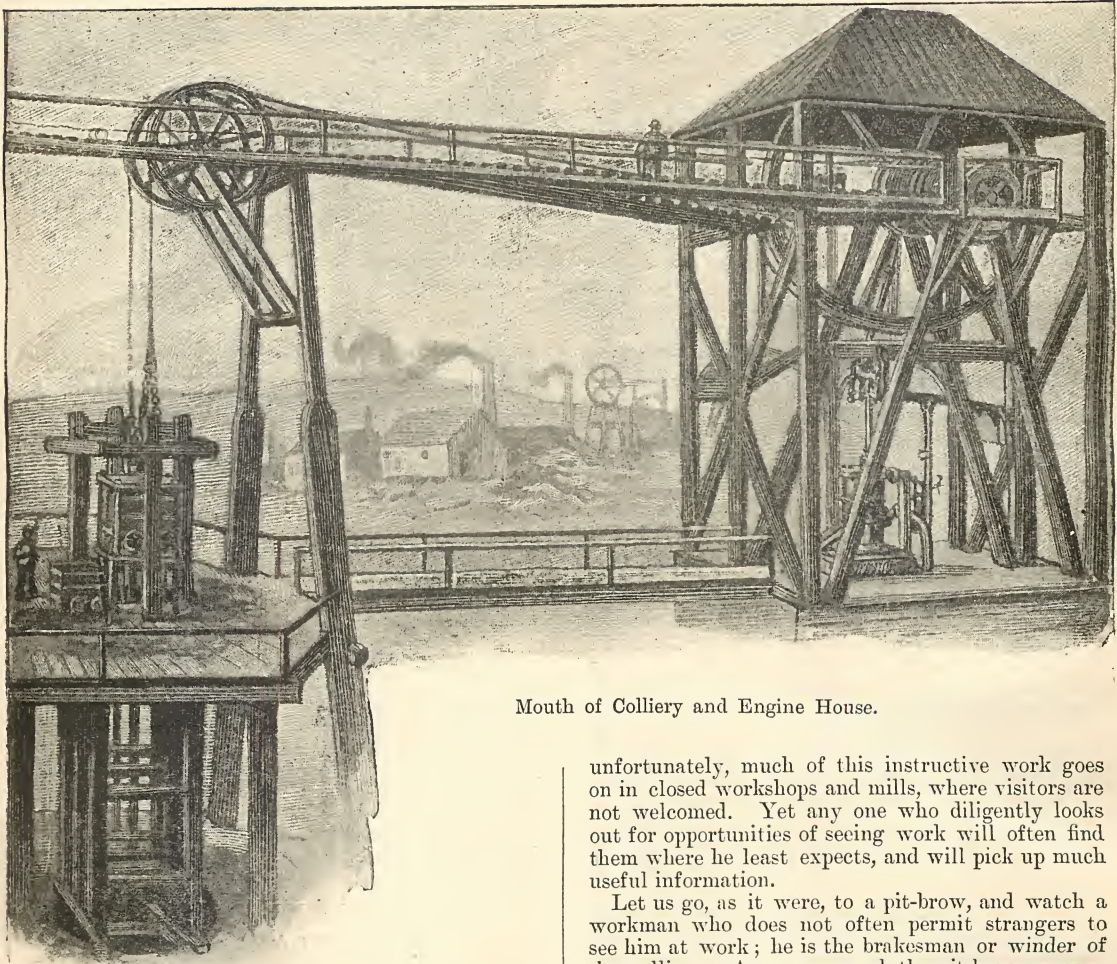
Teddy rose and followed, whilst Sloper skipped in front, leading the way till they reached a door in the port alley-way. Here the animal stopped.



"If ever a monkey talked, Sloper was talking then."

Teddy opened the door and disclosed the pantry where all sorts of food was kept. There were bunches of bananas hanging from the roof of it, piles of tinned meat on the shelves, tins of biscuits, enough food for a regiment of soldiers.

Sloper was hungry!
'Well, Mr. Toms may talk of his bob-tailed chimpanzees, that write poetry and all that,' said O'Brien; 'but for pure common-sense give me Sloper. Hi, Sloper!'



Mouth of Colliery and Engine House.

He handed the creature a fistful of bananas; then he looked round and found a canister of tea, a tin of condensed milk, sugar, everything that was needed to make a good meal except hot water. To light the cook's galley fire would take time, but Mr. Lockhead, who was a great tea-drinker, had a spirit lamp and kettle which he kept in the paying-out office, and Teddy dispatched Dick to fetch these, whilst he himself opened some tinned meat.

(Continued on page 269.)

THE BRAKESMAN.

ARE you ever interested in watching a workman at his work? There is always some instruction to be obtained in this way, and it is often more profitable instruction than that which is to be found in books, and more easily remembered; but,

unfortunately, much of this instructive work goes on in closed workshops and mills, where visitors are not welcomed. Yet any one who diligently looks out for opportunities of seeing work will often find them where he least expects, and will pick up much useful information.

Let us go, as it were, to a pit-brow, and watch a workman who does not often permit strangers to see him at work; he is the brakesman or winder of the colliery. As we approach the pit-brow we cannot fail to notice the tall, strong timber structure which stands over the mouth of the pit-shaft; at the top of it there are two great grooved wheels, over each of which there runs a strong rope made of twisted or plaited wires. One end of each of these ropes goes straight down the shaft, and we know that the boxes or 'cages,' which bring up the coals, are attached to these two ends; the other portions of the ropes slope away from the great wheels and pass through the walls of a building near the shaft.

If we enter this building, we shall discover that it is an engine-house, and our friend the brakesman is simply the engine-man; but he is an engine-man who has peculiar duties to perform: while most engine-men have nothing to do but oil and clean their engines in order to keep them steadily running all through the day, the brakesman is continually stopping and restarting his engine all day long. The engine's work is to draw the loaded cages up the pit-shaft and lower the empty ones, and every time a cage reaches the top or bottom, the engine must be stopped. The brakesman is, therefore, a

busy man in a quiet way, and can never leave his post for more than a minute or two at a time.

The engine lies along the side of the building, and its huge fly-wheel, which whirls round at a great speed when the engine is going, is close to the wall. At the end nearest the pit-shaft there are two enormous drums like gigantic bobbins, upon which the ends of the wire ropes which enter the engine-house are coiled. The drums are turned round by the engine in such a way that the ropes are wound on or off, and the cages are therefore raised or lowered. Both the drums turn together in the same direction, but one of the ropes passes over the top of one drum while the other goes under the other drum; the result of this is, that the movement which coils up one rope uncoils the other, and thus the loaded cage comes up and the empty cage goes down. If, now, the brakesman changes the direction in which the drums turn—which, by the aid of suitable mechanism, he can easily do—the cage which is up will go down and the cage which is down will be drawn up.

The brakesman's duty is, therefore, to set the engine and the drums in motion and stop them at the proper times, and to change at every stoppage the direction in which the drums are to turn. He has a separate rod or lever for each of these purposes placed in a convenient position; but these are not all. The heavy fly-wheel, when it is once fairly in motion, is not easy to stop—it would run on for some time, carrying the drums with it, after the steam was cut off, if some means were not taken to stop it quickly. If you look at the wheel closely, you will see that a broad, strong band hangs just off the lower half of the rim, and by means of levers, placed near the brakesman's feet or knees, this band may be drawn tight against the rim of the wheel so as to act as a brake on it. Many a cart-wheel and many a bicycle has a similar brake of a small kind on its hub.

But why should the brakesman be so particular to stop his engine and drums so quickly? These sudden stoppages strain the engine very much, and we may be sure there is some very great necessity for them, or the engine-man would not take this risk and trouble. The drums are usually ten feet in diameter, and at every turn they coil up about thirty feet of rope and draw the ascending cage the same distance up the shaft. Suppose that, when this cage had reached the top of the shaft, the drum gave two quick turns before it could be stopped: the cage would fly up into the air, dash full speed into the wheels above the shaft, and be wrecked; the trucks of coal would fall back down the shaft and do terrible damage. If the accident happened when a number of miners were ascending in the cage, they would almost certainly be killed. The brakesman has all that to think of, and it is only by his watchfulness, care, and promptitude, that these accidents are avoided.

There is one other difficulty: how does the brakesman, who is shut up in the engine-house, know when the cage has reached the mouth of the shaft? In front of him you will see a kind of clock-face, which has, however, only one hand; you will notice, too, that the hand only moves when the engine is

running, and it is, in fact, driven by the engine. You will see, if you watch carefully, that the brakesman is guided by this hand on the clock-face, and that he shuts off the steam as the hand passes a certain point, and brakes the fly-wheel the instant the hand is upright, or at twelve o'clock. The movement of the hand is so regulated that it makes one turn round the face while the cage is making its journey from the bottom to the top of the shaft, and the hand reaches twelve o'clock just as the cage arrived at the mouth of the shaft.

The engine and drums of the particular pit I have been describing are rather old ones, and quite insignificant when compared with those of some other pits. There are some modern winding-engines which have drums twenty or thirty feet in diameter, which pull up the cages at the rate of nearly a mile a minute, and raise over a thousand tons of coal a day. But the principle is the same throughout, and I think our visit has enabled us to understand the brakesman's work, and to see why he does not like to be disturbed. He has much to do to watch his clock and move his various levers at the right moment. We cannot but respect, to some extent, a man who can do this work year in and year out without carelessness and without nervousness, as the brakesman does.

SOMETHING TO BE PROUD OF.

IT is related that a European, who was rather too proud of his ancestry, had the ill-manners to remind President Lincoln of his humble origin.

'I believe you were a rail-splitter or something of that sort in your youth,' this small-minded man said to the President.

'Yes,' answered Lincoln, 'I was once a rail-splitter in Illinois; but I was the best rail-splitter in the country.'

THE SKYLARK'S SONG.

'WHAT shall I sing about to-day?' a little skylark said,
That in the far blue summer skies went soaring overhead.

'I have sung about the springtime, I have sung about the trees,
And the daisies in the meadow, and the happy, wandering breeze;

I have sung about my cosy nest that's hidden in the corn.

And my wife and little children, that are but newly born:

What shall my song be of to-day—of sky, or field, or flower,

Or cloudlet softly sailing, or rose within the bower?'

Now, in a lane far, far below, a little violet grew,
But leaf and moss and hedgerow quite shut it out from view.

There was no one to sing of it thus hidden right away,

And not an eye beheld it that passed along that way.

'Ah, me!' it sadly, softly sighed; 'if one of me would sing—
Some cuckoo in the meadow, some skylark on the wing:
How happy should I be if birds would make of me a song!
I wouldn't mind that hidden here I grew the whole day long.'

And the skylark, with love's quick, sweet glance,
saw the violet far below,
And said, 'Poor little blossom, that all alone must grow!
There is no bird to sing of you although you are so fair;
You do not bloom, like other flowers, beneath the sun's broad glare;
But modest, sweet, and lovely, you blossom in the lane:
O sweet and timid violet, of you shall be my strain!
Though in your green and silent home you ever lowly lie,
I'll sing about your sweetness and tell it to the sky.'

So it sang about the violet that blossoms in the spring,
And hides away among the leaves, and is so fair a thing;
It sang about its sweetness, its tenderness and grace,
And how it hangs its lowly head within its secret place.
And the violet heard it singing its note so blithe and free,
And said, 'O singing skylark, your song is all of me!
And its fragrance was the sweeter, and it took a deeper blue,
For the singing of the skylark, and its note so clear and true.'

A HUNDRED YEARS AGO.

True Tales of the Year 1808.

III.—JAMES, THE FOOTMAN.

IT was a fine summer's day in the year 1808, and the family of Mr. Gainton, a rich solicitor of Bath, were seated at the luncheon-table chatting merrily together, when they were startled by a heavy fall and a crash of china at the further end of the room.

On looking round, they saw the young footman, who had been waiting on the party, lying unconscious on the ground, with a broken plate beside him. 'Oh! oh! what is the matter?' cried Miss Sophia, the eldest daughter, preparing to go into hysterics, according to the fashion of the day amongst some young ladies when startled.

'It is James. Poor fellow! he has fainted,' said Mr. Gainton, hastily rising from his seat and bending over the young footman. 'I think, my dear,' he added, turning to his wife, 'that I had better bleed him; that will soon bring him to.'

Mrs. Gainton assented; but now Miss Sophia shrieked out: 'No, no! You must not bleed him. I shall faint if I see blood—I always do.'

Without taking any notice of his daughter's shrieks—for he was accustomed to her foolish ways—Mr. Gainton quickly produced his lancet, and knelt down by the still unconscious youth.

Blood-letting, it should be said, was, a hundred years ago, the remedy for almost every disease, and most gentlemen possessed a lancet, and had more or less knowledge of how to use it.

'Poor fellow!' again said the kind-hearted solicitor, as he bared the footman's arm in readiness for the operation. The next minute, however, an exclamation of surprise burst from him, and he called out to his wife in intense agitation: 'Maria! Maria! come here! Come at once, and look at this!'

Alarmed by her husband's voice, Mrs. Gainton left her daughter to recover from her hysterics as best she might, and quickly crossing the room, she stood by her husband's side.

'What is this, Maria?' he said. 'Tell me what you think.'

As he spoke, he pointed to the footman's bare arm, on which was tattooed, in small, neat letters, the initials, 'J. G.,' and just below a heart with a dagger thrust through it.

'I don't know,' faltered Mrs. Gainton, turning very pale. 'Can it be our poor lost John?'

'Can it be! It is, I tell you! I am sure of it! Who else could have his initials and crest?'

'But it is sixteen years since our dear boy disappeared so mysteriously with his nurse,' said Mrs. Gainton, looking anxiously at the features of the young man; 'and he was but a baby then, and this is a man. Still, I feel as if he had a look of our little Johnny. And then these tattoo-marks. Oh! how angry I was to find your sailor-brother had disfigured my baby's little arm in that way; but if it was to lead us to recover our lost boy, I shall be glad he did it.'

'I am convinced that this James, as we have called him, will be our lost John,' said Mr. Gainton stoutly. 'See! his eyes are opening; he is coming round. I shall not need my lancet, after all. We will question him when he is fit for it.'

In a short time the young footman had completely recovered, and, on being questioned by his master as to his former life, he gave a very straightforward account of all that had happened to him.

As far as he could remember, he had always lived in a little village some twenty miles from Bath, and there the Squire's lady had taken a fancy to the good-looking boy, and made him her page, passing him on to Mr. Gainton's household as footman when the boy had grown too big for page's buttons.

Mr. Gainton went himself on the following day to the village where the young fellow had spent his childhood, and found several people there who well remembered his supposed mother, now dead, arriving there with the child sixteen years before—just at the time when Mr. Gainton was searching everywhere for his baby-boy, who, with his nurse, had so suddenly disappeared from his house.

Bit by bit the evidence was put together, till at last it was established beyond a doubt that James, the late footman, was indeed the long-lost John Gainton, and great were the rejoicings at his restoration to the family.



“‘Come at once, and look at this!’”



“‘I do not believe it could come brighter if I rubbed it for ever.’”

THE OLD COPPER KETTLE.

'THERE! that must do! I do not believe it could come brighter if I rubbed it for ever,' said Madame Trévot to herself, as she gazed lovingly down on the old copper kettle she held on her lap. 'It shines like the sun at mid-day!' she continued, as she gave the kettle one more rub for the mere pleasure of feeling her cloth pass so smoothly over the shining metal. Then she sat still for a few minutes, recalling the old memories which the brightening of the kettle always brought back to her.

She was but a poor old Flemish peasant, living by herself in a tiny cottage by the side of the canal, but she had come of a good old stock, and all her surroundings bore witness to this fact. The lace on her old-fashioned cap would not have disgraced the train of a grand Court lady. The high-backed chair in which she always sat had come down to her through many generations of ancestors.

She was a handsome old woman too, and in spite of her clumsy wooden shoes, she made a pretty picture as she sat there with the sun shining full on her—the prim worked shawl contrasting well with the bright blue apron which formed such a good background for the copper kettle.

This apron, however, was only worn for actual work, and was now put on to protect the spotless white linen apron which peeped out on either side of the blue. It would be taken off when the polishing was done, and the full glory of the linen apron would then be revealed.

The polishing of the old kettle was certainly one of the joys of Madame Trévot's life, and was not to be hurried over, so she looked up almost impatiently as, after a preliminary knock at the cottage door, her niece came in on her way to market.

'Well, Aunt, polishing the old kettle, as usual?' said the niece after the usual greeting on either side.

'Yes, my dear,' replied the old woman with dignity. 'I've kept this kettle bright since the day my poor husband brought me here as a bride, and I hope to do so till I die.'

'Oh, don't talk of dying!' said the niece, 'but you are quite right to think a lot of that kettle. My husband says if you were to sell it you could get a pretty sum for it. A very old kettle like that is rare nowadays, and fetches a great price.'

'Sell it!' said Madame Trévot, with a look of real horror on her handsome old face. 'Sell the kettle! Never! never! never!'

She got up from her chair as she spoke, and stamping across the room in her heavy wooden shoes, she slowly—one might almost say reverently—placed the kettle on the high shelf above the open fireplace, taking good care to turn the vessel so that the date 1609 faced well to the front.

'There!' she said, turning to her niece and speaking slowly and firmly. 'There that kettle stood on the day my poor husband brought me here as a bride, and there it shall stand till I am carried out to lie beside him.'

Some weeks passed, and one day it suddenly struck the old lady that she had seen nothing of her niece or any of the children for some time. 'She's but a heedless thing, but she means well,' said the

old woman, 'and she is all I have of kith or kin; I think she might look me up a little oftener.'

Hardly were the words out of her mouth before the usual knock came to the door and the niece came slowly in.

But how changed from the sturdy, bustling woman she had been but a short time before—pale and red-eyed, with her clothes huddled on anyhow, though as a rule she was apt to be a little vain of her looks and very particular as to what she wore.

'Well, Aunt, how are you?' she said gently, and her altered voice struck the old woman, who looked sharply at her.

'What's the matter with you, Anna?' she said; 'you look strange.'

'Oh, I'm well enough,' answered the younger woman, the tears filling her eyes, 'and if I have troubles, folk say it is cruel to bring them to old people, and that's why I have kept away of late.'

'Tell me what is wrong. I shall only fret if you keep things back,' said Madame Trévot. 'Now tell me straight out.'

'Oh, dear! oh, dear!' sobbed the niece. 'How can I tell you? Things are so bad! we are to be sold up to-morrow, and we shall have to go to the Poor-house.'

'The Poor-house!' said the old woman, in an awe-struck voice. 'But your husband was a thrifty man, he had money in the bank.'

'Yes, yes,' sobbed her niece, 'but the bank has failed, and everything we have has gone, and we can't pay the miller, and we owe for the building of the new barn. Oh, dear! I oughtn't to tell you, for I know well enough you have only just enough to live on, and you can't help us; but when you're full of misery it will out,' and the sobs continued as the poor woman got up, and, hastily kissing her aunt, ran quickly out of the house.

Madame Trévot sat in her high chair for an hour or more, feeling fairly dumb-struck by the sad news.

'The Poor-house. In the Poor-house!' she kept repeating to herself. 'My own niece! I wish I could help her, but I have no money, and nothing but money will help this trouble.'

Just then the afternoon sun fell full on the copper kettle, and, at the same moment, the thought flashed into the old woman's mind: 'I may not have money, but I have money's worth!'

But she put the thought from her. How *could* she sell the kettle! No one could expect her to sell the one thing which made the brightness of her home. She would not think of it; but, try as she might, the thought kept coming to her again and again: 'You might sell the kettle—you might sell the kettle!'

At last she could bear it no longer.

'Heaven forgive me, for a selfish old woman,' she said to herself. 'I have been making an idol of that kettle, but I'll do so no longer. I will sell it this very day, and my niece shall sleep in peace under her own roof to-night.'

If you were to visit Madame Trévot's cottage to-day, you would not see the copper kettle on the high shelf, but if you were to ask after it, she would answer quite cheerfully:

'Yes, it's gone! it's all for the best! I was too fond of it. There's brighter things than kettles to

care for, and the money that kettle brought has kept my niece's home for her, and that's a bright thought that cheers me. I'm glad I had the chance of making others happy.'

With such thoughts as these to brighten her closing days, I do not think the old woman will miss the old copper kettle.

'CARRY ME.'

'**C**ARRY me,' a small seed said
To the kind breeze as it blew;
And the wind the small seed bore
Far across the ocean blue;
Dropped it in a desert place,
Where no other flowers were,
And it blossomed fair and sweet,
Shed its fragrance on the air.

'Carry me, O kindly air!'
Said a sweet and lovely song.
'I would cheer some saddened heart,
That has lonely been for long.'
So the kind air took the song,
Bore it on its light, soft wing,
Dropped it in some lonely heart,
Caused the weary one to sing.

'Carry me,' a dewdrop said
To a little beam of light,
Shining in the morning hour,
'I would reach the sky so bright.'
So the bright beam took the dew,
When the sun sank down the West;
Bore it far and far away,
And the dewdrop was at rest.

THE 'BEST HOUSE' IN ARDAGH.

THOSE of our readers who have read Goldsmith's play, *She Stoops to Conquer*, will be interested to hear that the incident of the hero mistaking the Squire's house for the inn is a true one, and happened to Goldsmith himself.

It was in 1774, and Oliver Goldsmith, a clumsy boy of seventeen, had just left school, and was riding on a borrowed hack to visit some friends at Lissoy. He had a whole guinea in his pocket, and this unaccustomed wealth so turned the Irish schoolboy's head that when night came on, and he found himself still some miles from his destination, he inquired, in a very lordly way, of a chance passer-by, 'Which was the best house of entertainment in the neighbourhood?'

The man he addressed, being an Irishman, was fond of a joke, and he undertook to show the way to the 'best house' in the neighbourhood; so he led Goldsmith to within a few paces of the great Squire Featherstone's house in Ardagh, and told him he would find all he wanted there.

Oliver rang at the gate, gave his horse in charge, and was duly shown into the parlour, as it was supposed he was an expected guest. Very soon the Squire appeared, and soon realised the mistake the lad had made, and determined to humour it.

Oliver had a good supper, and was condescending enough to insist on his 'host' and his wife and

daughter having supper with him. On his way to bed he stopped to order a hot cake for breakfast, and it was not till he had finished an excellent breakfast, and was looking ruefully at his only guinea, wondering how much of it would be left after paying the bill, that good-natured Squire Featherstone explained to the somewhat bumptious boy that he had been entertained at no inn, but at a private gentleman's house.

CAUGHT IN THE ACT.

ONE bright spring morning about sixty years ago, a little shoe-black was standing at the entrance of the Pont Neuf, one of the bridges which cross the Seine.

The boy was looking out for customers, but none came, for as yet it was very early. Tired of doing nothing, he put his hand into his pocket, and drew forth a piece of chalk. He then began to sketch something upon the stone parapet of the bridge.

The subject of his sketch was a very peculiar face, broad across the jaws, and narrowing as it sloped upward. Above the high narrow forehead appeared a pointed tuft of hair. Evidently the boy intended this for the likeness of a real man, but from a little distance it resembled nothing so much as a huge pear.

So utterly absorbed was the shoe-black in his picture, that he failed to notice the approach of a man who came up behind him—a stout, grey-haired old fellow, plainly dressed in a faded brown coat, and a hat considerably the worse for wear. Under his arm he carried a cotton umbrella. All unknown to the young artist, this individual was gazing over his shoulder, with a broad grin of amusement on his own peculiarly-shaped face.

And well might he be amused. The face which the boy was drawing was a portrait of his own. The old gentleman recognised his own heavy features and queer tuft of hair, the sly expression of the half-closed eyes, and the pear-shaped head. One might have said that the boy was doing this portrait from life if his subject had been in front of instead of behind him.

But the looker-on had a cold, and suddenly he sneezed loudly. The sketcher, startled, turned his head, and, perceiving who stood behind him, almost fainted with terror.

'The King!' he muttered, frightened out of his wits.

'Himself, at your service,' said King Louis Philippe, gaily. 'Go on, pray! I seem to have come just in time to act as a model. Go on.'

The boy's first impulse was to run away, but the kindly twinkle in the King's eyes re-assured him.

'I didn't mean to make fun of you, your Majesty,' he stammered, 'but it *is* like you, isn't it?'

'Very much so,' laughed the King. 'I wish the pears in my garden would grow half as big as yours; but as I can't spare the time just now to stand and be sketched, I'll give you a likeness of myself to copy at your leisure.'

With that the King put into the boy's hand a gold piece, on which was stamped the head of Louis Philippe.

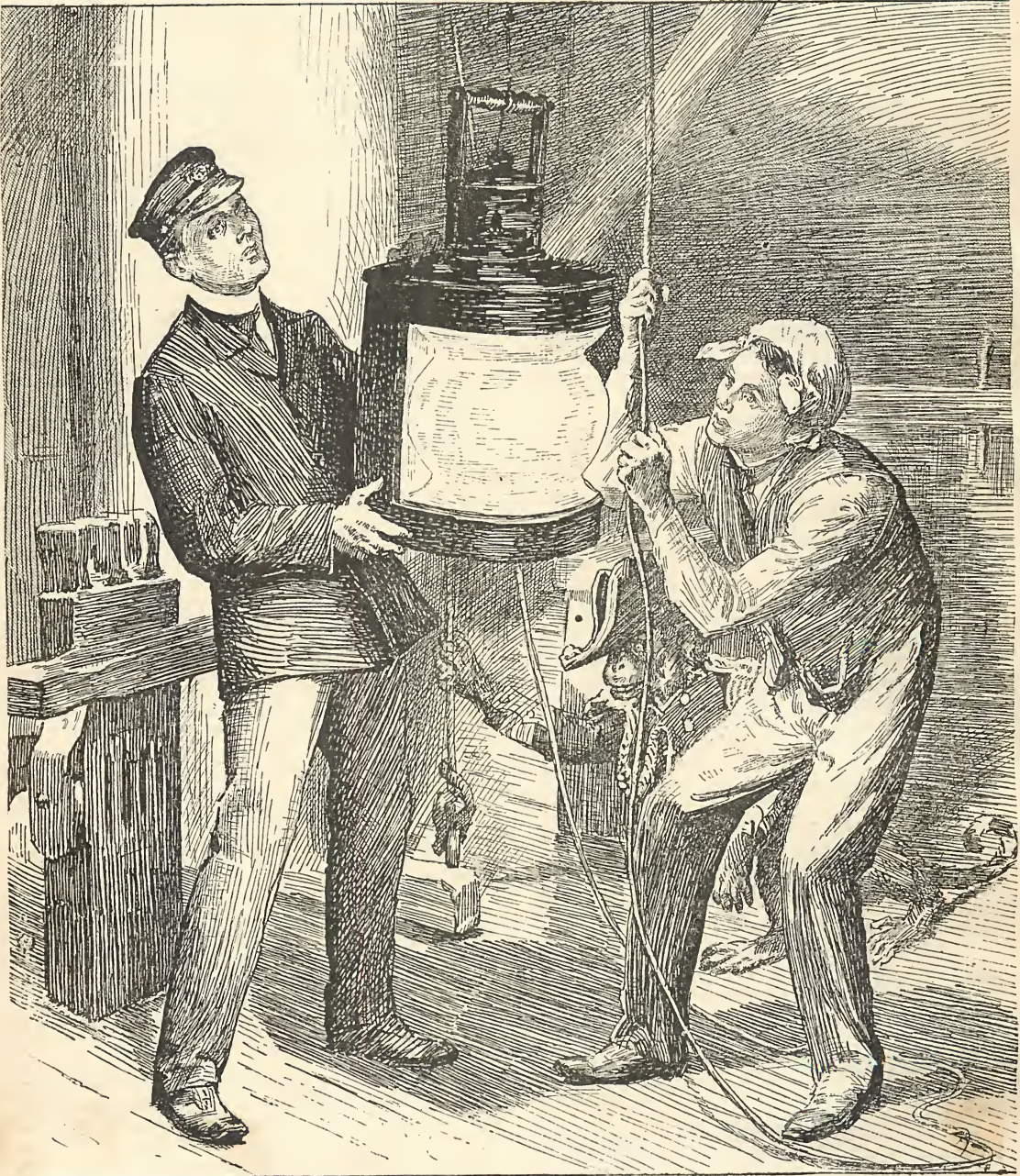


“The face was a portrait of his own.”

Long after Louis had been dethroned and driven into exile, a popular French portrait-painter used to tell that the first portrait for which he had received

payment was that of the King himself; and those who heard the story would say, ‘He was not such a bad old fellow, after all.

E. D.



"They got the lamps and lit them."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 261.)

CHAPTER XXIII.—DREAMS OF FORTUNE.

THE chart-house on the spar-deck (that is, the raised deck level with the bridge and abaft the

funnel) was the most comfortable part of the ship. It had a broad table, velvet-upholstered couch and chairs, lockers for charts and navigation instruments, and a book-shelf containing every book a navigation officer needs, from the *Nautical Almanac* to *Hoyt's*.

It had, also, glass windows all round it, so that a view could be obtained in every direction.

They brought the provisions up here, and spread them on the table; and when they had finished they came out on the bridge and looked around.

The *Kingfisher*, with a very slow drift, was steadily drawing clear of Gommera. Nothing could well be more savage and grand than the cliffs of the island seen thus, close in. Here and there a tiny hut clung to the cliff-wall, and here and there a goat or two browsed in the ravines. To starboard lay the sea without a sail or sign of life upon it; the faintest stir of air was coming from the south-west.

'We mustn't be idle,' said O'Brien, as they turned back to the chart-house. 'First of all I want to run over the rest of the ship—our ship, old chap—and see if these chaps have done any damage. Then we must rig up lights of some sort for fear of being run into to-night. We have heaps to do—come along.'

Now in comparative safety and after a good meal, they were in the highest spirits; they stopped first at the after cable-tank in the square, and having got the tarpaulin off as far as possible, peeped down. It was a large circular well, in which the cable was stowed, coil upon coil. Then they came up to the paying-out office and examined it. It was simply littered with papers and books flung hither and thither; the drawers and lockers were burst open and everything was in the wildest confusion.

'They have been hunting for the ship's money,' said O'Brien. 'They didn't know the Russian Finn had taken it, so of course they thought we had collared it, and I expect that's what made them so keen in chasing us. If old Lockhead saw all his papers and books in this condition he'd go out of his mind. Come on down to the saloon.'

The saloon was in a worse condition even than the paying-out office; the mirrors were smashed, the curtains torn down, glass and china strewn broken upon the floor, and the velvet of the couches ripped up with knives.

'The brutes!' said O'Brien as he surveyed the wreckage; 'they have broken our best glass and china!'

Marley smiled at Teddy's air of proprietorship, and followed him out of the saloon along the alley-way and on deck again.

'Now for the engine-room,' said O'Brien.

They descended the steep, steel engine-room ladder backwards.

The great triple-expansion engines looked workman-like and fit. No damage had been done to them, so far as they could see.

O'Brien looked them over with a satisfied air.

'They're all right; now let's have a peep at the stokehold.'

He took a lantern and lit it and led the way down a passage between the main boilers and the side of the ship, a passage just broad enough for a man to pass along.

The stokehold was a dismal place, about twelve feet broad by thirty feet long. The furnace doors ran along its whole length with the boilers above. Opposite the furnace doors were the coal-chutes where the coal came tumbling down when the ship

was under steam, forming mounds on the floor ready to be shovelled into the furnaces by the stokers.

'Hallo!' said Teddy, 'the stokehold's flooded!'

About eight inches of water was on the floor. It had not entered the engine-room because the stokehold was on a lower level.

'Something must have burst,' said Teddy; 'one of the steam pipes most likely.'

They looked around the dismal place, and then regained the deck.

'I say,' said Teddy, as they emerged from the engine-room hatch; 'how good the fresh air is! Now I can understand why they deserted the ship. They kept the fires banked up and didn't mind their pressure gauges, the pipe burst, and then, of course, the ship was useless to them, for they hadn't any one on board who could mend it.'

'What shall we do now?' asked Marley.

'Lots; I want to hunt a lantern up to make a night signal of.'

They found two lanterns in the steam steering-gear house, and O'Brien prepared and trimmed them.

It was now drawing on towards evening, and leaving the lanterns ready to be run aloft, one to the gaff of the mizzen-mast and one to the mainyard-arm, they brought two deck chairs up to the bridge and sat down, tired enough, to talk matters over and consider their luck.

Gommera had now drawn several miles away on the port quarter; the sun was down on the western horizon, and his lower limb would soon be touching the water.

'Do you know,' said Teddy, stretching out his legs, 'I wouldn't exchange my position for a first-class ticket on the best mail-boat home. There's no pleasure in the world like not knowing what's going to happen next.'

'If the cable-hands and the crew have got to Teneriffe,' said Marley, 'won't they send some one to search for us?'

'Of course they will; but you see we are amongst the Spanish islands, and you don't know the Spaniards; if there is an old tub of a gunboat in Teneriffe harbour or at Las Palmas, it will take her about half a century to get a move on her, and when they do get her out of harbour with steam up she will most likely break down, or the captain will remember that he has left his snuff-box behind him, and back they'll put. Alonz knew what he was doing when he planned this job. Have you got those bank-notes safe?'

'Quite!'

'Even if we do not manage to save the ship ourselves,' resumed O'Brien, 'we have not done badly, for we have saved all this money, and even if we have to get help from some passing ship to bring the *Kingfisher* into port, we will stand in with the salvage-men, though, of course, then our share will be much less than if we had done the thing single-handed. I tell you what,' he finished, getting up and pacing the bridge in an impatient manner, 'we must do the job ourselves even if we float about till we're as old as the Ancient Mariner; think of the money it means; my old governor is none too much rolling in riches—'

'Nor mine,' said Marley.

'Well, you just think if we could only bring them the salvage money.'

'My!' said Marley, 'wouldn't it be grand?'

'Grand's no name for it. Think of what a joke it would be; we wouldn't say a word till we got the cheque, and then we'd change it and turn it into gold, and get the gold in a bag and empty it in a heap on the dining-room floor, and cover it up with a cloth, and call them in, and ask them to take the cloth off and see what was under it. Now let's get the lamps on her—talking won't do the business.'

They got the lamps and lit them, and ran them aloft.

Then O'Brien lit the steamer lamps, red on the port side, green on the starboard. The night had now fallen, and the sky was beginning to fill with stars. A silver sickle of light was just appearing on the horizon: it was the moon.

They determined to sleep in the chart-house, and lit the swinging lamp there. Sloper, who had vanished for some hours, reappeared, and they brought him into the chart-house for company and shut the door.

There were two fine red velvet-covered lounges, and, as the weather was warm, they had no need for blankets.

'I hope nothing is going to run into us in the night,' said O'Brien as he took one of the couches and tucked Sloper in beside him. 'If they do they must be blind, for we have lit her up no end, and I don't know what more we could do unless we put fairy lamps round the bulwarks and had a brass band playing on the bridge, and one must leave something to chance.'

'Seems to me we have been taking heaps of chances lately.'

Teddy broke out laughing. 'Do you know, if a fellow wanted to train for a hundred-mile race, Gommera would be the place, if all the inhabitants are like the ones we struck. I never did so much running in my life before.'

After awhile they put out the lamp, and then lay listening to the creaking of the ship as she swung to the almost imperceptible swell of the sea.

(Continued on page 279.)

THE LONGEST WIRE FENCE IN THE WORLD.

NINE hundred miles is the length of the wire fence erected along the border of Queensland, in Australia. Its cost was 25,000*l.*, and its object was to keep back the millions of rabbits that infest the neighbouring States. It was only about the year 1860 that the first pair of domestic rabbits were turned loose in the State of Victoria. At first they were protected as being valuable game, but in the course of ten years they became a pest. They found the mild climate, the friable soil, and the thick woods an ideal place for their home, and soon they overran New South Wales, as far north as the Murray River. This wide stretch of water stopped them for a year or two, but eventually rabbits were seen on the further bank, and before long there were swarms.

It was at this period that the Queensland Government erected the costly wire barrier.

Officials patrolled the long fence continually, but the great drawback to its usefulness was the impossibility of running the fence across roads and rivers. For a year or more the fence answered its purpose, however; then, one day, a keeper saw rabbits on the wrong side of it. These were chased, shot, and a rigorous watch kept for others, but the rabbits succeeded in passing the boundary in larger numbers.

To-day the fence is of little value; it is only kept in repair because it serves to check to some extent the teeming hordes that exist south of it. How to get rid of the rabbit is a serious problem for the Australians.

J. W. H. H.

THE BLUEJACKETS' BEAR-HUNT.

A FINE specimen of a black bear, belonging to the crew of the first-class cruiser, *Devonshire*, made matters quite lively in Chatham Dockyard one afternoon.

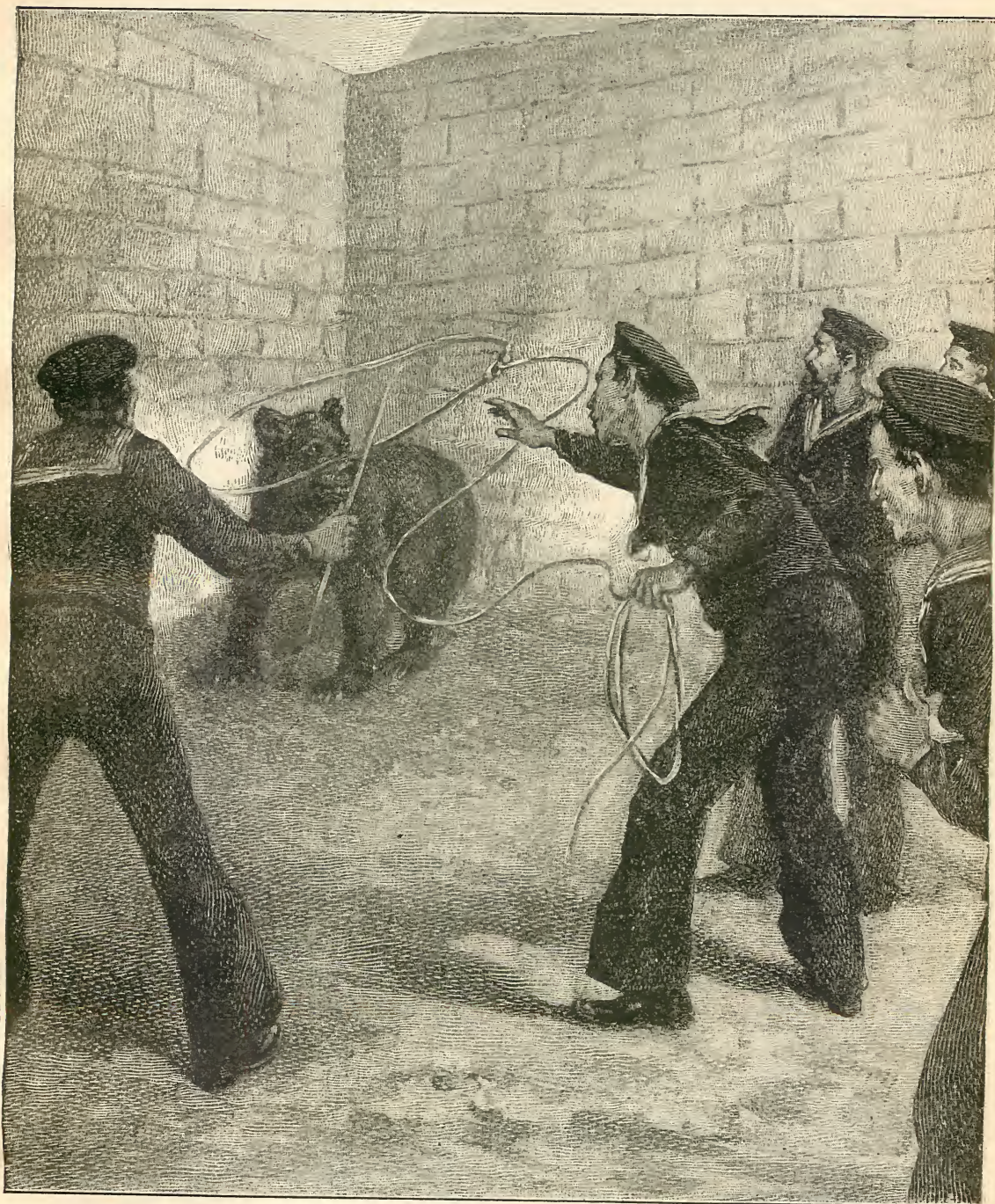
Sailors are fond of strange pets, and the hearts of the men of the *Devonshire* went out towards Bruin. Excellent relations had been established between them, and the bear was generally good-tempered and playful. One day, while the bear was being taken for a walk in the dockyard—possibly the strangeness of his surroundings affected his temper—he suddenly showed signs of insubordination. In a fit of rage he snapped at the calf of the bluejacket who had charge of him. Startled by the attack, the keeper dropped the chain by which the animal was fastened, and Bruin was free to go where he pleased.

Trotting round the edge of the dock basin, he first paid a visit to the dock engine-house, the door of which was standing open. Great was the astonishment of the workmen when they were suddenly confronted with the ferocious-looking animal. They fled, and for a time the bear was in sole charge of the machinery. But he remained fairly quiet until the appearance of a party of bluejackets and marines, intent on capture.

By a skilful disposition of the invading force, the bear was gradually driven into a corner, and, though for a time he defied the attempts made to capture him, he was eventually secured by means of a lasso. Bruin, closely guarded by his captors and a stalwart policeman, was led forth in triumph, but as he passed through the ranks of the dockyard men, who had been enjoying the sport, a desperate effort enabled him to regain his freedom.

The sight of the formidable-looking jaws was too much for the crowd of men, who melted away as if by magic, several of them falling over each other in their anxiety to put a safe distance between themselves and the bear.

For nearly two hours an exciting hunt was kept up, the animal leading his pursuers a fine dance across the waste land on some extension works. He dodged in all directions, and occasionally rushed at those who were trying to make him a prisoner. It was not until the bear was well-nigh exhausted that he was captured and removed to the Royal Naval Barracks.



"He was eventually secured by means of a lasso."



"The puffin had invaded his stronghold."

A FIGHT FOR HOME.

Founded on Fact.

A WIDE, sandy common, swept by the sea-breezes, and, growing among the patches of stiff grass, little but heather, bracken, and furze—how utterly deserted it looked!

Yet, had some wanderer passed that way any moonlight night, he might have seen the heath alive with the bounding forms and twinkling white tails of the rabbits, whose burrows were sunk under almost every furze-bush.

All the burrows lay close together, for rabbits mostly live in company; but one young couple, careless of the advice of their elders, had chosen to make their home at a distance from the usual place, within sound of the ever-beating waves and the wild cries of the sea-birds circling about the face of the cliff, among the ledges and crannies of which they had made their nests.

'I really have no patience with those old folk!' cried Brownie to his mate. 'Why should we be forced to stay in the same place for ever? I believe our family has lived for so long in one corner of the world that they think it is the only safe thing to do: it is time we youngsters taught them better.'

It was not likely that Brownie's devoted mate would contradict him. 'Indeed,' she said, 'I think you are much more likely to know what is good for us than any of those old-fashioned creatures. I am sure that not one of them has your wits and strength.'

'You will make me vain if you talk like that,' answered Brownie, who, however, was rather of the same mind himself. 'Still, I think I am at least clever enough to protect my little mate from all those mysterious dangers we were warned against.'

The 'little mate' had not the smallest doubt of this; and work was soon begun in the chosen spot at the cliff-edge. The position seemed all that could be wished, and the sand was just right for burrowing; indeed, at every pause in the work the rabbits congratulated each other that they had followed out their own fancies, since doing so had led them to so charming a place.

'This is the first time I have had any peace or quiet all my life,' declared the little mate as they sunned themselves at the mouth of the finished burrow. 'At the old warren, every minute one was tumbling over a neighbour, or being upset oneself. My fur was getting rubbed up the wrong way all the time, with the jostling and pushing.'

'It is far too pretty for me to allow that,' said Brownie, with an admiring look.

'I really did try to listen to the tales that were poured into our ears,' the other went on, 'but they were all so vague. "So independent," cried one. "Think of the disagreeable neighbours you might have," said another. "You would never dare go out together," added one old creature, "for how could you leave your home unprotected in such a lonely place?" And when I asked why, she began a long story of how some far-away relation of hers had been turned out of his burrow. Did you ever hear such nonsense? I really could not wait for

the end, for when one of them began to blame you for putting unusual ideas into my mind, I just skipped away for fear I might say something rude.'

'Well, well, you are better-mannered than I, for I must confess I did not listen at all. I could see no reason myself for not coming here, and I think I can trust my own sense so far.'

By no means frightened by the old rabbit's warning, almost every night the young couple were to be seen frolicking together on the wide down, in full enjoyment of the free space around, or making long rambles to distant gardens, where those bold enough to face the risk might find the choicest dainties for a midnight supper-party.

Sometimes these wanderings would take the rabbits back to enjoy, for a time, the company of their old friends at the warren, but always to return better pleased than ever with their own retreat.

As Brownie and his mate neared home early one morning after one of these rambles, their quick ears caught the sound of a number of strange grunts, disturbing the usual stillness.

Both glanced anxiously around, but, seeing nothing to alarm, ambled along once more at their ease.

Again the grunting, this time louder than before.

With one bound, the more timid female prepared to seek safety in her burrow; but, alas! that refuge was denied her. A shadowy form filled up the passage, two pairs of eyes shone through the darkness, while a sharp, powerful beak struck violently at the shrinking form of the intruding rabbit.

Bold now to good purpose, Brownie thrust himself between his mate and the enemy, and for a few moments a fierce battle took place.

In courage, the two were fairly matched, but, in spite of his larger size, the rabbit found his powers no match for the parrot-like beak of the puffin who had invaded his stronghold; and, as generally happens, at last the sturdy birds were able to drive away the first owners, and prepared to set up house-keeping in the burrow themselves, so saving the trouble of digging a sheltered place for the single white egg, which would be laid on the bare earth somewhere about the middle of May.

Terrified and dismayed, the two rabbits had fled together over the common, caring only to put a long, long distance between themselves and the fierce little sea-birds who had turned them into homeless wanderers.

Worn out by the battle and the flight, with drooping ears and heaving sides, Brownie at last dropped down under a friendly furze-bush, while his mate, forgetting her own trouble, crept to his side to comfort him.

'Never mind, dear one,' she whispered, fondling him with her soft paws, 'I am too glad to think that you escaped from that fearful bird to care for anything else. We will make a new burrow, far enough away from the cliff-edge for there to be no fear of the sea-birds finding it again; then we shall forget this dreadful night, and be as happy as ever.'

'It was my fault,' murmured poor Brownie. 'You would never have left the old warren if it had not been for me. After all, the old folk were wiser than we thought. Next time I shall, at least, listen to what they have to say.'

WISHES.

WISHES, they are but little things,
 Less than a bird with tiny wings;
 Yet we are wishing all the day:
 We wish the rain would go away;
 We wish the way were not so long;
 We wish the feeble ones were strong,
 That they no more might suffer pain;
 We wish that we were grown to men.

If we could make our wishes true,
 What would you wish that you might do?
 One wish that's good there is, I know,
 That we may better, kinder grow,
 Doing each day what good we can,
 As child, and, when we're grown, as man;
 And just this wish we too may frame,
 That every one would do the same.

NATURE AT HOME.

Some Every-day Habits of the Animal World.

I.—THE MIGRATIONS OF BIRDS, ANIMALS,
AND FISHES.

(Continued from page 246.)

WE have already described the migration of birds—creatures which enjoy peculiar facilities for moving from place to place by reason of their wonderful powers of flight. But flight is by no means essential to migration, as we shall see. Before we go further, however, it will be well to point out that whereas the migration of birds is generally periodic—that is to say, it takes place regularly, year after year, as the seasons come round—with many other animals it takes the form of an exodus on a grand scale, marked by no return of the wandering host. Many of my readers, for example, must have heard weird stories of men who have encountered great hordes of rats travelling across country towards some goal, apparently unknown even to themselves; and large bodies of weasels have similarly been met with, possessed by the same desire to take up fresh abodes. These cases are, however, less wonderful than the strange migrations of that curious little animal known as the lemming. In its general appearance it resembles a short-tailed rat, and is to be met with in Norway and Sweden. As a general rule, it has to be carefully sought for by those who wish to make its acquaintance. But every few years, its numbers increase so enormously that food enough for all cannot be found. Accordingly, thousands and thousands suddenly make their appearance all hurrying in one direction. They move as an army, and march regardless of all obstacles, swimming across streams, and even lakes several miles in width, devouring everything before them, and leaving ruin behind them. In their turn, poor things! they are pursued by crowds of beasts and birds of prey—bears, wolves, foxes, dogs, wild cats, stoats, weasels, eagles, hawks, and owls. Even cattle, fowls, and reindeer join in the slaughter, trampling them under foot, and even eating them, while man himself proves the worst foe of all. Yet on they go, till at

last the remnant that are left reach the sea; but even this presents no terrors for them. Impelled by some blind instinct, they plunge in, with the apparent intention of seeking some new country beyond the reach of enemies, where want will never reach them. Alas! vain hope; speedily the hungry sea swallows them up, and they are seen no more.

Migration of this kind is evidently a more or less compulsory movement, and does not take place regularly—that is to say, it is not governed by the changes of the seasons. The antelopes, zebras, and other large animals which live in the burning veldts of Africa, similarly, in seasons of great drought, are driven by the sufferings of thirst to make enormous journeys in search of water.

Of a different order are the migrations of reindeer, which, both in Europe and America, perform regular spring and autumn migrations, moving southwards to escape the rigours of winter, and northwards to avoid the heat of summer, which they dislike.

Whales and seals are great migrants. These animals have certain favoured areas to which they return each year, because they find these places afford the most suitable accommodation for their young. As soon as the young are able to leave their nurseries, they, with their parents, disperse, wandering for hundreds of miles. Yet, next year they return, with unfailing regularity, as though the whole route were marked out for them.

Fishes, too, are wonderful migrants, and no better instance of this could be found than that of the salmon. Year after year these fish will return to the same river in which to deposit their eggs, and to accomplish this end they often undergo the greatest hardships, and overcome the most formidable obstacles, such as leaping over waterfalls. Sometimes these are so high that they can only be passed after repeated efforts, leaving the fish quite exhausted for a long time. Sturgeon, though less familiar to dwellers in the British Islands, similarly leave the sea each year for the purpose of laying their eggs in certain of the rivers of Russia, which they ascend in enormous hosts.

But how many of my readers are aware that butterflies migrate? Yet they do so, though only occasionally. *Why* they do so, no one has ever yet been able to understand. Possibly it is due to changes of temperature, which warn them that they must seek, for that year at any rate, new regions wherein to lay their eggs. Myriads of butterflies have been met with at sea, in the Pacific Ocean, miles from land; and flights are recorded as having crossed Ceylon, which were composed of millions of insects. They formed a vast cloud several miles in breadth, and occupied several continuous days in their passage! And similar hosts, though on a smaller scale, have often been met with crossing the North Sea, on their way to Great Britain! The 'painted lady' and 'cabbage white' butterfly have both been more than once met with on such perilous journeys.

Somehow, we cannot but feel astonished to find that butterflies, even occasionally, travel so far and in such enormous bands. Yet these are scarcely more wonderful than the far more frequent migrations of locusts, of which all of us have heard. These creatures, every now and then, travel in hordes so

great as to cut off the light of the sun at mid-day. And whenever they alight, they leave ruin behind them, for they devour every green thing within their reach. Not till this is done, indeed, do they take wing again. A plague of locusts, *Chatterbox* readers will remember, was one of the appointed scourges of the Egyptians.

The migrations of animals, then, may be occasional or periodic, and may be due to one of many causes. Thus, migration may be due to overcrowding; to



A Horde of Lemmings migrating.

the increase of numbers beyond the means of obtaining food; and in such cases it is 'intermittent'—that is to say, it takes place only on rare occasions. It may, on the other hand, as in the case of the swallow and cuckoo, be due to the necessity of seeking warmer quarters each year, for the sake of



Salmon leaping up-stream.

obtaining suitable food; or it may be undertaken annually for the sake of securing suitable nurseries for the young, as with seals and whales and fishes.

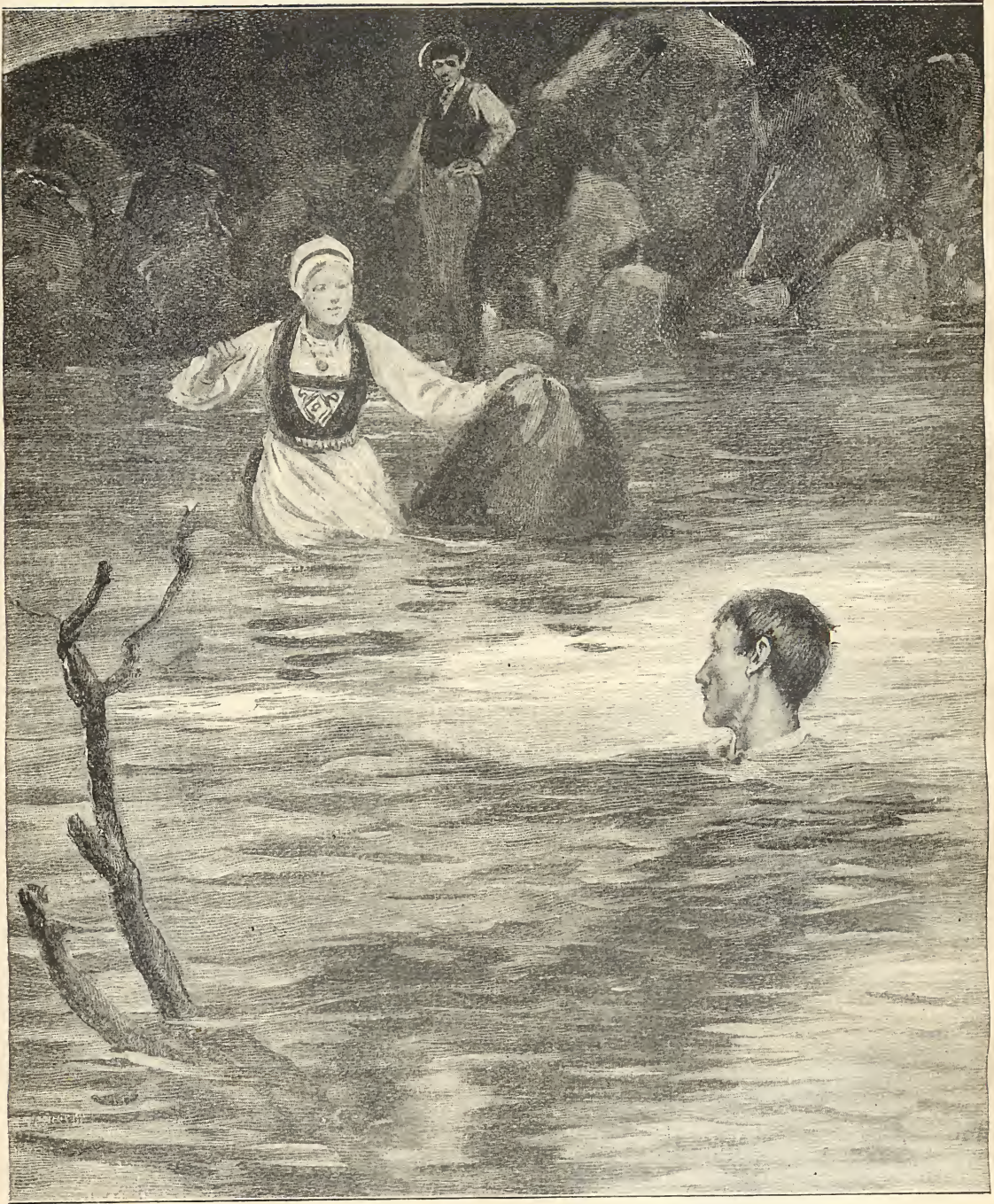
W. P. PYCRAFT, F.Z.S., A.L.S.

ROUND. THE CAMP-FIRE.

III.—FOR ASTRIDA'S SAKE.

I WAS fishing in Norway (said Ralph one night, as he and his friends were seated round the camp-fire), at a village called Kronheim, not far from Christiania, on the river Nek, a few years ago, when I met with a very peculiar accident.

I had hooked a fair-sized fish in a pool, and had played him for a quarter of an hour, when he sulked and went to the bottom, fouling my line round a snag, and somehow thereby contriving to rid himself of the hook. I tugged in vain; there the line was, and there it remained, and I was unwilling to break the thing because I had already lately lost a line, and I could not spare another. What was to be done?



“Astrida waded into the water.”

I decided that I would wade in, swim to the spot, and dive, hoping to see how my line was caught, and, if possible, to loosen it.

I did so, and the result was disastrous, for, having remained under water as long as my breath held out without succeeding in disentangling my line, I came

to the surface only to find that I was now myself a prisoner, for my hook, dangling at the end of its trace down in the depths, had somehow most unfortunately caught me by the leg and held me tight.

Now, this made my position extremely awkward, for the water was deep, and I was obliged to keep myself afloat as best I could; and it instantly occurred to me that this ridiculous accident might easily be the cause of my death by drowning.

I felt frantically for my pocket—that in which my knife was invariably kept—and remembered that I had left both coat and waistcoat on shore before wading into the water.

I contrived to get hold of the gut portion of the line close to my leg in order to tear it asunder if possible; but this I found impossible, for, the portion of line between snag and hook being but a short one, I was unable to get at it with both hands, or even comfortably with one. I was, in fact, a prisoner, with little prospect of escape, unless, indeed, I were reduced to tear the hook—a large salmon hook—which had contrived to get a firm hold in my leg, by main force from its grip.

But this I hesitated to do until I had exhausted all other means. At any rate, I could yell.

Old Hansen's farm, in which I lodged, was a mile and a half away. It might be possible to make my voice carry that distance with the wind, but, as it happened, the wind was a contrary one. Nevertheless, I would try my best.

Well, try I did, and I may just mention that old Hansen, when I inquired afterwards whether he had heard any one shouting, remarked that he had distinctly caught the sound of some person bawling or singing in the distance, but had concluded that the noise proceeded from some uproarious fellow returning home from the market at the little town of Rudenkollen. So that, so far as old Hansen was concerned, I must either have been drowned, or have torn that huge salmon-hook ruthlessly out.

But, fortunately, I was not compelled to adopt either of these courses. Help came from another direction.

As I floated, yelling at intervals and trying between-whiles to ease the pain of the tugging hook (for the current caused the wretched thing to pull), the sight of something moving in the distance caught my eye, and I perceived, to my intense relief and joy, that two persons came running along the river-bank a quarter of a mile away. As they neared me, the leader answering my shouts, I recognised the figures: they were those of Svante Hansen, my landlord's son, and of a pretty girl, by name Astrida Nyman, the daughter of a neighbouring farmer, to whom I knew Svante was much attached.

They came running up panting, and their faces, when they caught sight of me in mid-stream, apparently able to keep afloat but not to move from one spot, were a sight to behold.

'What is the matter?' Svante cried. 'Have you cramp?'

I replied with an explanation. 'For goodness' sake,' I said, 'come here with a knife and cut me adrift! I am getting numbed with cold.'

But Svante's countenance fell. He rummaged in his pocket and produced a knife.

'I have a knife,' he said, ruefully; 'but—how deep is it where you are? I cannot swim!'

My heart went cold as ice. I remembered now that old Hansen had told me many times how great a grief to him it was that Svante, for all his virtues, was a terrible muff, and fell far short of other youths in the district in every manly sport and exercise, with one exception: he was an excellent performer upon the *ski*, the long Northern snowshoes. But Astrida surprised and delighted me.

'Give me the knife, Svante,' she said; 'I can both swim and dive. I shall soon release the English Herra.'

'You are sure you are a good-enough swimmer?' I asked. 'It is deep, and there is a considerable current.'

'Are there any more hooks besides the one which has caught you?' she asked, smiling. And when I replied that, so far as hooks were concerned, I had the only one, Astrida sat down without further ado and removed her boots. Then she waded into the water, and in half a minute was close to my side.

'Hand me the knife, Froken Astrida,' said I. 'There is no need for you to go under.'

'But I wish it,' she laughed. 'I love to dive!' and before I could employ further argument the girl had disappeared beneath the surface. An instant later a fearful twinge of pain made known to me the fact that she had caught hold of the piece of line which held me, and in another moment or two I felt the strain relax—I was free.

Astrida came laughing to the surface, and together we went splashing to the shore.

Here the girl opened a second blade of the Norwegian knife, which was a perfect tool-box of useful contrivances, such as the tweezers, with which she had divided my gut-line, a file, a small saw, and so forth. 'If the English Herra pleases,' she said, 'I will remove the hook.'

A sharp-pointed blade, directed by Astrida's deft fingers, soon performed the little operation, and within five minutes of her arrival on the scene I was none the worse for my experience, excepting for the loss of a little blood and a thorough soaking.

Poor Svante had looked on, abashed and ashamed, and when Astrida ran away homewards in order to rid herself of her wet clothes, he walked with me towards the house in which we both lived, and we conversed.

'I shall learn to swim to-morrow,' he began. 'I am ashamed. I vow I shall learn to-morrow.'

'I will teach you,' I said. 'It was lucky for me that your Astrida was with you!'

'My Astrida!' he groaned. 'I wish to heaven she were my Astrida!'

'She seems to be fairly contented when in your company,' I laughed. 'I have seen you together many times.'

'Oh,' said Svante, 'Astrida is all right! We love one another well and truly. It is old Nyman who will have none of me.'

'Why not?' I asked. 'You are your father's only son; your farm is twice the size of Nyman's, and you have besides a fair income from the fishing of this river.'

'It is not that,' he faltered. 'Nyman considers

that every young man should be, as he himself has been, a great hunter, fighter, swimmer, and goodness knows what besides. Because I am not physically very strong—I inherit weak lungs from my mother—and have not half his own energy, he will not have me for Astrida. He has told me more than once that Astrida is not for such as me, and he told me the same thing again to-day.'

'At any rate you shall learn to swim this very week,' I laughed. 'That will be one button upon your wedding-coat. We shall see whether I cannot teach you other things—rifle-shooting, and so forth, besides!'

Well, I took Svante in hand, and taught him to swim in a few days. He was surprised to find how easy an accomplishment it was. I took him out salmon-fishing, and instructed him in the art of throwing a fly, in the use of the gaff and landing-net; I allowed him to practise with my rook-rifle. A week or two later I made old Nyman's acquaintance, and did my best to gain his good-will by praising his daughter Astrida, of whose service towards myself the modest girl had never even spoken to her father.

'Svante Hansen, who was unable to swim, was so abashed that he has since learned to swim.'

'Bah! Svante Hansen is an unmanly fool,' he said.

I disagreed. 'For Astrida's sake,' I said, 'he will yet prove himself as manly as the best.'

'He shall not have Astrida,' old Hansen replied, looking angrily at me. 'Astrida shall marry a man who is a man, or she shall remain a maid.'

'He shall prove himself a man,' I insisted, 'and you shall yet admit it. Why, I am told there is no one in the district who can run with him upon the *ski*.'

'His reputation has been too easily gained,' Hansen laughed, 'for he has never competed.'

'When he competes, he will win for Astrida's sake!' I said. 'You shall see.'

'Let him win the *ski-hop* at Holmen-Kollen,' he replied, 'and with all my heart he shall have Astrida!'

(Concluded on page 286.)

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 271.)

CHAPTER XXIV.—A NARROW ESCAPE.

A SHAFT of sunlight awakened the boys. It was full morning: such a glorious morning as one seldom sees outside the Spanish parallels.

Gommera, Heiro, and Palma lay to the East, a long way off. Teneriffe seemed about the same distance as it had been yesterday. A warm breeze was blowing, but it was blowing straight from Teneriffe.

'The current is taking her right out into the Atlantic,' said O'Brien. 'We're making for Brazil as far as I can see. Bother the wind: if it would only shift to the opposite quarter, we might try and get some sail on her.'

However, there was no use in wishing, so they drew some buckets of sea-water, tubbed, and then proceeded to breakfast. The boat they had captured from Gommera was still at the grating, and O'Brien decided to leave her there, at all events for the present.

'Everything is clear,' said he, 'and there's no use in setting a watch when there's nothing to be seen but the sea. I'm going to fish.'

'What are you going to fish for?'

'Anything I can catch, but I'm going to fish in a way of my own. Mr. Lockhead has a little trap-net he uses sometimes in shallow water. He is a great naturalist in his way, is the old man. I have always been wanting to fix it on the wire of the Kelvin sounding-machine, and lower it a mile or so, and see what it would bring up. Of course such an idea is high treason, and Toms would simply scalp me if he heard of such a thing, for the sounding-gear is the thing he prizes most on earth next to the buoys. But I have got the sounding-machine all alone for once in its life, and I'm just going to make it do a little original research by way of a change.'

He went below and got the trap-net, weighted it, and then fixed it on to the end of the wire on the reel of the Kelvin machine. It sank of its own weight, dragging the wire after it with a prolonged whine.

'It's down a good depth now,' said O'Brien, who was an expert in sounding. 'Let's haul it up again.'

He had uncoupled the crank from the piston connection, and Marley and he took it in turn to turn the crank by hand, a terribly slow and tedious business, but at last the net appeared, dripping and jumping, for it was full of live things.

'Whoop!' cried the fisherman as he brought it on deck. 'Did you ever see a catch like that?'

He opened the trap and shot the contents out on to the deck.

The contents had been taken from very deep water, and were certainly the strangest-looking catch ever beheld by fishermen.

There was a jet-black fish, as black as a coal, and about a foot long: a white fish without eyes; a crab shaped just like a toad; and several other creatures equally strange.

'I'll tell you what,' said Marley, who was kneeling on the deck examining this catch, 'if ever I make money, I shall go in for deep-sea study and exploration. I know a bit about natural history, and it's jolly interesting; but if you hunt all over the world you will only find things other people have found already, but these things are new, no one has ever seen them or heard of them before.'

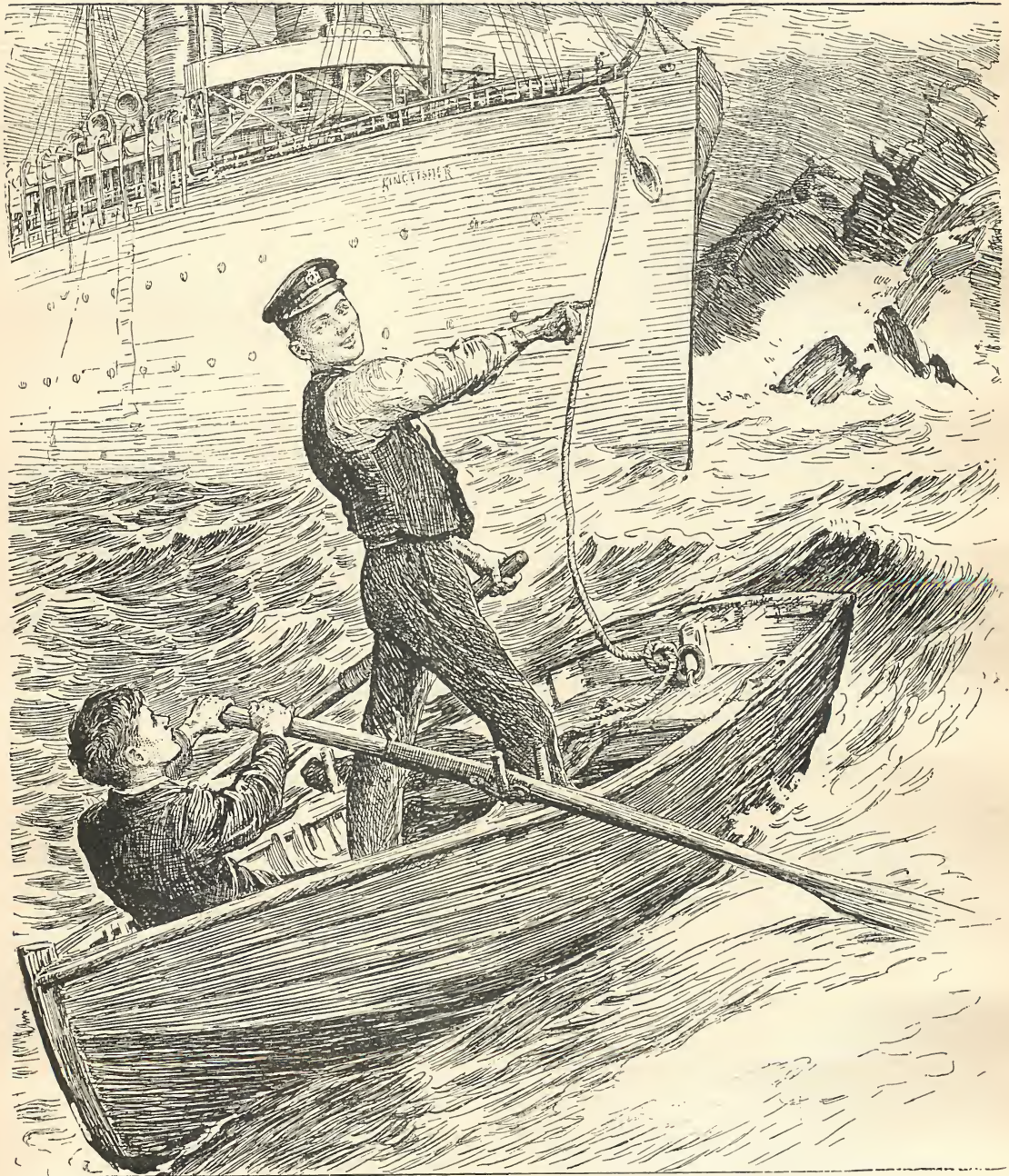
'I'm with you there,' replied Teddy. 'If we get this hooker into port, and make some money, we will get a forty-ton fishing-yawl, and rig her up with deep-sea gear and trawl-nets, and take the Kipper along with us, and go a voyage round the world, sounding, and fishing, and trawling. We will photograph every queer thing we catch, and make a book of it. Now, wait here whilst I run up and take an observation, to see if there's anything in sight.'

He went forward and up the steps to the bridge. There were no ships in sight, but there was something else no less important. Right ahead, about a quarter of a mile away, a spine of rock rose from the sea like the dorsal fin of a vast fish, savage-looking spurs projecting from it, and even in this calm weather a creamy foam showed where the spurs goaded the sea. Right ahead it lay, and the *Kingfisher* was making for it, slowly but surely.

(Continued on page 282.)



"The strangest-looking catch ever beheld by fishermen."



"Saved by a few feet only!"

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 279.)

TEDDY stood for a moment aghast, for he knew that if those sharp spines of rock were to come in contact with the ship's hull, they would cut into it as easily as a cheese-knife cuts into a cheese. There was just enough swell on the sea to raise her and bring her down on them. The only chance was to alter her course, even ever so slightly.

'Quick, Dick!' he shouted, running down the bridge-ladder. 'Rocks ahead! Come and help me.'

Marley sprang to his feet and followed, without asking a question, for he knew by his friend's manner that there was some imminent danger. They got the jib loose, and the triangular sail filled gently to the steady breeze; then O'Brien fastened a tow-rope to the capstan, and flung the other end of the rope overboard to starboard. Then, followed by Marley, he unseized the wheel at the after-gratings and lashed it hard a-port.

'Now,' he cried, 'into the boat, and let's get hold of the tow-rope, and tow to turn her head round for all we are worth!'

It was fortunate he had left the boat at the steps instead of streaming her astern, for every second was of the most vital importance. They tumbled into the boat, cast her loose, rowed forward, seized the end of the tow-rope, and fastened it to a huge ring in the stern sheets; then they bent to their oars with a will, tugging at the ship's head, the oars nearly bent double.

Whoever has towed a ship, even in an eight-oared whale-boat, knows what heart-breaking work it is. It is like trying to tow a continent: every effort seems of no effect. O'Brien and Marley were not trying to tow the *Kingfisher*, however, but only to alter the direction of her head a little. They pulled diagonally away from her to starboard. Now the tow-rope would be dipping in the water, now taut and humming, and flinging diamond drops of spray from itself like a water-dog. The rudder and the gently filled jib lent some little assistance, but very slight, for the ship, though moved slightly by the sail and the boat, had scarcely steering-way on her. Between the strokes of the oars they could hear the steady washing of the sea on the shark-toothed rocks that lay abreast of them.

'She will do it,' gasped O'Brien, glancing from the rocks to the beautiful white ship astern. 'I believe she will do it.'

The ship was now abreast of the rocks, still riding on an even keel, as proudly as if she had half a mile of blue water under her. The boys to starboard of her could see nothing, and they could do no more; she must drift now with the current even as they were drifting, and save herself as she could.

In passing the rocks O'Brien had noticed that there was a rise and fall of the swell, amounting to two or three feet, and he knew that a three thousand-ton ship lifted and dropped three feet on those razor-like spurs would be cut open like a haddock. He listened for the rending noise that was sure to come on the impact; but still the *Kingfisher* drifted on slowly and stately as some swan upon a lake.

An hour seemed to pass, then, at last, he gave a

great shout. The rocks had fallen astern, the ship was saved!

Saved by a few feet only, and but for these few feet she would now have been sliding back into deep water, slowly filling, her decks bursting up, sinking never to rise again.

CHAPTER XXV.—A FLEET IN BEING.

THE incident made them both thoughtful rather than elated, for it showed them what a helpless cripple a great, strong ship is, when undermanned.

Sloper had been on the barks during the whole of the proceedings, superintending matters with a grave and puzzled expression: the position was new to him, and he now greeted his masters by skipping on the deck before them.

He had been taught by the cable-hands to skip for his dinner. O'Brien had no watch. At least, the captain's watch which he was wearing had stopped; but he knew from the monkey's antics it must be noon, for the cable-hands' dinner was always served at twelve, and Sloper, as far as meal-times were concerned, was almost a perfect chronometer.

They washed the plates and knives and forks they had used for breakfast, opened some tinned beef and a tin of preserved peaches, and O'Brien, foraging below in the steward's pantry, returned triumphant with four bottles of ginger-beer.

Just as they were going into the chart-house to dine, they paused to look at something worth seeing.

A great albatross was passing the ship at about the height of the mainyard. It was moving by some mystery of flight without a stir of the outspread wings. So motionless was it, that it might have been a bird carved out of marble: yet its speed was great.

'I've often read of fellows on board ship catching those things with a hook and line,' said Marley as he watched the beautiful bird disappearing in the West, 'and I think it's a shame.'

'So do I,' said Teddy 'and so does the governor. I remember, last expedition, that boulder, Diego, shooting a beautiful white gull that was following us; we were going ten knots and he couldn't possibly pick it up. He just shot it for cruelty's sake, and Toms told him he was a Dago pig, and I told Toms he had no right to libel pigs like that. But come on, dinner is waiting.'

They were sitting after dinner on the bridge. Teddy, for want of something better to do, was engaged in dressing Sloper up in his Admiral's rig; he had just fixed the cocked hat on the creature's head when, looking up, he observed a strange appearance on the horizon to northward that made him forget Sloper and everything else.

(Continued on page 290.)

THE MUSICIAN.

I HEARD the skilled musician play;
The full chords came, then died away;
And still, as strain succeeded strain,
I heard the tender, sweet refrain.

So may our thoughts, our deeds, our words,
Be sweet as sweet-resounding chords;
And all our life and actions be
Like lovely-sounding melody.

SHOES.

TO most readers of *Chatterbox* one of their first presents was probably a pair of shoes.

Shoes from the earliest time have denoted possession, and even a tiny baby has a 'possession' of a standing-room on the earth. An important baby is often asked to 'pay for its footing,' and gifts of money are sometimes given to tenants or dependents, when an heir is born to a great estate. Among the Bedouins, a dying chief, just before his death, hands his shoes to his heir. In Benares, women put their shoes by their market-baskets, which no one must touch. In many parts of the East, shoes outside a shut door mean that no one is to enter. In all these cases shoes mean possession.

Some of our earliest stories are about shoes, like 'Puss in Boots,' 'Goody Two-shoes,' and others.

Valuable presents are given in foot-gear. In a recent presentation, a cheque for some thousands of pounds was presented in a child's sock, and an ancestor of the present writer had her wedding shoes filled with golden guineas. In weddings, we all know of the slipper being thrown—for 'luck,' as some people say. Its origin also denoted possession; in the very oldest days, the bride's father gave the bridegroom the shoe, to denote that he handed over to him the possession of his daughter.

In the Bible, we see Ruth's relative handed over the shoe to Boaz, a sign that he gave him both Ruth and her land.

PUZZLERS FOR WISE HEADS.

14.—TRANSPOSITIONS: MODERN INVENTIONS.

1. Pearl get H.
2. Rap got machine.
3. I, O! blue atom.
4. Morgan Hope.
5. Note heel P.
6. Pretty wire.

C. J. B.

Answers on page 323.]

ANSWERS TO PUZZLES ON PAGE 251.

13.—(A) Fruit.

(a) Fir. (b) Fur. (c) Turf. (d) Rut. (e) It. (f) Fit.

(g) Ocean.

(a) Cone. (b) Cane. (c) Canoe. (d) Can.

THE THIEF'S ACCOMPLICE.

AT a levée one day, Charles II. observed a thief picking the pocket of one of the courtiers; the rascal had just taken a gold snuff-box from a nobleman, and was hiding it about his person, when he looked up and caught the King's eye fixed upon him. With a ready impudence, he winked and held his finger up, as much as to say, 'Hush! it is a joke.' The King was so amazed at the man's audacity that he smiled and said nothing, and the thief took his departure with his booty.

Presently, the courtier discovered his loss, and Charles was much amused to see him feeling in one

pocket after another for the missing snuff-box. For some time the King did not say anything, but at last he broke silence, saying, 'You need not look for your snuff-box, my lord; it has been stolen, I saw it done, and the thief made me his accomplice!'

J. H.

SAVED BY A PIGEON.

IN the day that civil war broke out in Morocco, a trader had sent his son, a boy of about fourteen, on horseback to treat with a Moorish farmer for the produce of his field. The distance was but six or seven miles, and although there were rumours of hostilities, it was considered safe for the boy to be sent. He reached the farm and delivered his message—an offer for so many baskets of dates, oranges, bananas, and so on—and set out on his road home again.

But on the road he met a party of tribesmen, galloping swiftly and with shouts and gesticulations, aroused to fever-heat by the proclamation of war. It was part of the Moorish programme that all 'foreigners' were to be driven out of the country, and consequently the English boy was promptly seized. The Moors bound him and conveyed him to a hut in the village close by, to await the sentence of their chief.

On the bare floor of this prison the poor boy sank down. Outside, the street was full of screaming men and women. But as he lay he had a strong desire to open the window and look out on the sunny landscape. He stole, therefore, to a *side window*, and furtively opened the casement.

How brightly the sun shone, and what a pity it was he had been sent to the plantations on that ill-fated day! He looked up at the blue Moroccan sky, regarding it long and intently. Then, suddenly, a speck sailed into view, a bird high up in the heavens, that circled round and round as if in search of a spot for alighting beneath. The boy started; the next instant he had thrust two fingers into his mouth and blown a shrill whistle.

The bird was a pigeon, one of the boy's own pets; it heard and knew the familiar whistle; it descended, and the boy caught and drew it in through the window.

'It's little Piddy!' he exclaimed joyously. 'And—something's tied to its leg! A bit of paper! Yes. Mother's handwriting, too! "Come home at once—by the hills; the Moors have broken out in war." She must have meant the bird to follow me to the farmer's. Dear, kind Mother, and dear, good Piddy to do me this service!'

He took the paper slip, searched his pockets for a pencil, and wrote down: 'I'm shut up by the Moors in the last house on the right in the front street of Salaska. Tell Father to come at once.' This message he tied beneath the pigeon's wing again, fondled the bird for a minute, and then set it free. He watched it till it disappeared in the blue, then shut the window, and sank on the floor again.

A long time he lay; the sun sank and the night came on; all through the long hours there was the tramp, tramp of a sentry outside his door, and



“‘Something’s tied to its leg.’”

curious women and children peeped in upon him through the front casement. Suddenly, in the gathering night, he heard the clatter of swiftly approaching horsemen. He started to his feet, and at the same moment the sentry at his door and the

women at the window deserted their station. A voice he knew was calling loudly, ‘The last house on the right! Here is the one!’

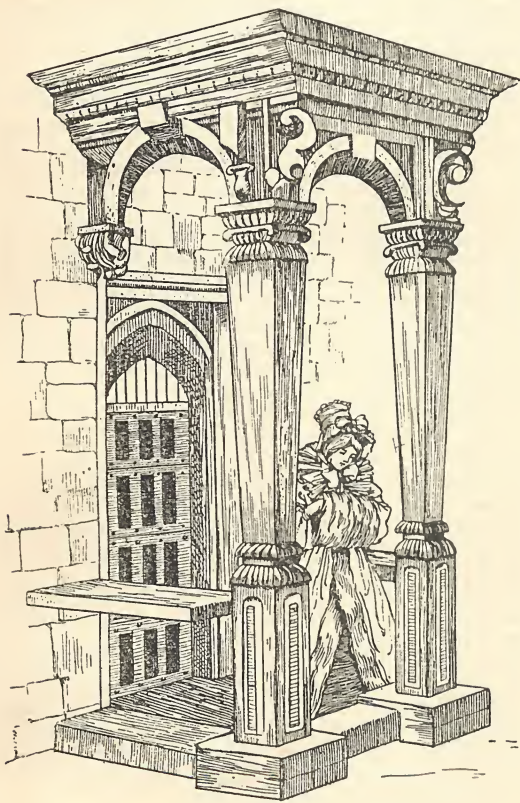
A minute later he had flung open the door, and was climbing up into the saddle behind his father.

DOORS, LOCKS, AND KEYS.

II.—PORCHES.

A PORCH is a desirable although not an essential addition to an outside door. It contributes greatly to the good appearance of a building by breaking the hard lines of the architecture, and at the same time affords warmth and protection to the interior. In a biting north-east wind, I fancy most of us can appreciate a cosy porch, where we can find shelter and await the opening of the door with patience. The good people of the Elizabethan age seem to have known the advantages of porches, and for many subsequent reigns few houses, whether of the nobility or of cottagers, were built without some such protection to the chief entrance.

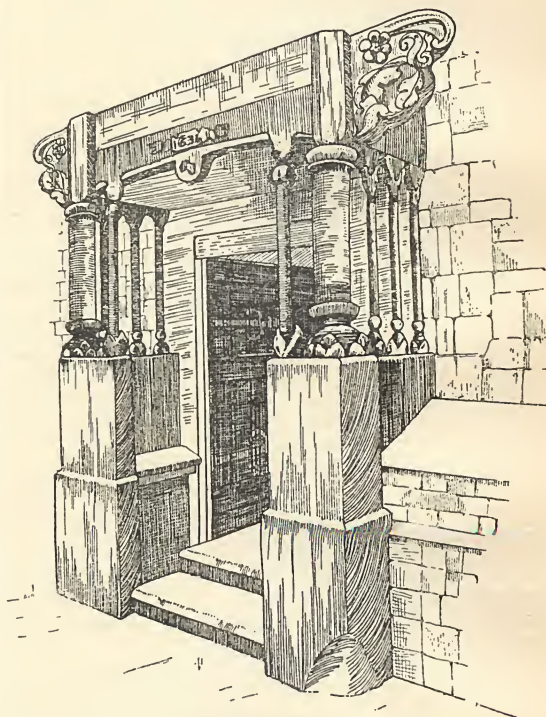
Grand houses had often quite roomy porches built of stone, and an especially fine instance of these, both as regards size and originality of design, is that



Old Porch of Wood, from a House at Bristol.

of Charlcot, near Stratford-on-Avon. Many *Chatterbox* readers will, no doubt, remember that it was in the park surrounding this mansion that Shakespeare is said to have taken part in a deer-stealing expedition. Other beautiful porches are that at the Nag's Head Inn at Leicester and a famous one at an old house in Bristol.

Porches of wood, chiefly of oak, were often attached to houses, and many of these were very ornamental both in design and execution, and the deep, bold carving on them endured the assaults of wind and rain for many centuries. In Elizabethan houses the porches were usually approached by steps, probably to ensure dryness, and were fitted



Porch of the Nag's Head Inn, Leicester.

with seats on either side. Here, in the long summer evenings, the family and friends would gather to enjoy the fresh air and sociable chatter, just as in the humble cottage porch the goodman, with a comfortable feeling that his day's work was over, would sit with his wife and children around him.

The accompanying drawings of wooden porches are taken from one of the works of Richardson (a celebrated architect of the early part of the last century), published in the reign of King William IV. A doorway with a porch of extreme beauty is that of Dutton Hall, near Northwich, in Cheshire, of which very little of the old building remains. The whole entrance is a mass of solid wood-carving, figures of men, kings, and angels, besides all manner of animals, some fearful and wonderful monsters, with scroll-work decorating lintels, cornices, and side-posts. Over the doorway is this inscription: 'Sir Pepys Dutton Knight Lord of Dutton and my lade Dame Julian hys wijf made this hall and buildings in the year of our Lord God mccccxliij, who thanketh God of all.'

In Church architecture porches are practically universal, attached at least to one door, usually the

south entrance to the nave. They are built of stone, wood, or, in East Anglia, of flint-work, and are often of large size, with seats at either side. The south porch of Gloucester Cathedral is a good instance, and the exterior carving of this is very fine.

HELENA HEATH.

ROUND THE CAMP-FIRE.

III.—FOR ASTRIDA'S SAKE.

(Concluded from page 279.)

I WENT home and repeated Nyman's words to Svante.

'The old man,' I told him, 'has nothing against you excepting your laziness. You *can* overcome your natural slackness, as you have already proved to me. Are you prepared to go still farther, for Astrida's sake?'

Svante's handsome face flushed; it assumed a determined look, such as I had noticed he had worn once or twice before.

'For Astrida's sake,' he said, 'I would go through fire and water. I cannot excel in such things as require great strength and staying power. Do you mean that old Hansen expects me to make a reputation like his own for long-distance running, on foot or *ski*? I have not strength.'

'Yet you have a reputation as a *ski*-runner?'

'For shooting a hill, or jumping small precipices, yes; but for mere trick *ski*-ing, Hansen has little respect.'

'And yet,' said I, 'he promised me only this day that the man who should win the *ski-hop* (*ski*, or snow-shoe, leaping competition) 'at Holmen-Kollen, at Christiania, might, if he liked, have Astrida on the spot.'

I saw Svante's face grow slowly crimson.

'Old Hansen said that!' he murmured. 'But the *ski-hop* at Christiania is open to all the world. What chance should I have? My reputation is only local. I have never competed even at Ruden-Kollen, where a hop of ninety feet wins.'

'What is your best, then?' I asked.

'One doesn't measure without the platform and all the apparatus,' he said, thoughtfully. 'With practice, I might perhaps do about that.'

'Svante, you shall practise all next winter,' I cried. 'You shall have a platform and a good course, and you shall spend your days—for Astrida's sake, mind you!—in practising. What wins at Holmen-Kollen?'

'Anything up to one hundred and thirty feet,' he murmured. 'I should never do it.'

'Not even for Astrida's sake?' I said.

Svante remained silent and thoughtful. Suddenly he rose and gripped my hand.

'Thanks,' he said, 'my friend! Yes, for Astrida's sake, I *will* try.'

A few days after this I left Norway, after a cordial farewell to my friends at the farmhouse. I gave Svante my address, and asked him to write to me. I should like much, I said, to hear of his progress with his preparation for the great National *Ski-hop*.

'Perhaps I shall be over to see it,' I added; 'and I shall expect you to win, for I shall bring a wedding present with me for you and Astrida.'

Svante smiled, but shook his head sadly. 'It is too much to expect of me,' he said; 'do not expect it, though, of course, I shall do my very best.'

When winter came—that is, about November—I received a letter from Svante. He wrote hopefully. There had been plenty of snow. 'I have made a platform as you advised,' Svante wrote, 'on the slope of the hill which is behind the farmhouse—you will remember. At first I was very stiff and also clumsy. I had a run of fifty yards, fairly steep, behind the platform, and plenty of free room beyond. At the foot of the hill is, as you will remember, a gully, and after my best jump I ran clean up the opposite slope and fell backwards in such a way that I was powerless to recover my feet, and was obliged to shout for help (like you in the river). My father was inclined to be angry when he found that the man in distress, for whom he had to leave his dinner, was none other than myself; but when, with me, he returned to measure my jump, he was pleased enough, and laughed. My first jumps had been only forty to sixty feet. This one was ninety-four. You may imagine that I have taken heart. . . .'

After this I received a postcard once or twice a week, and Svante's reports as to his progress in *ski-hopping* filled me with the best hopes for his success, after Christmas, at Holmen-Kollen.

Once, too, I heard from little Astrida, who wrote to thank me for having inspired her lover. 'He makes wonderful progress,' she wrote, 'and even my father is interested, though, alas! he still declares that, unless Svante is able to distinguish himself at Holmen-Kollen, he will have nothing to do with him as a son-in-law. It is so hard to distinguish oneself when one competes with the very best in all Norway and Sweden. Here, in this district, there is no one to come near Svante's best jump. Has he told you that he cleared over one hundred feet on Saturday?'

All this determined me that I would undertake a pilgrimage to Christiania at the time of the National *Ski-hop* Competition, in order to witness Svante's great effort, and, if possible, encourage him by my presence. I bought a wedding present, and took it along with me to show him that my confidence in him was strong and real.

Well, I found both Svante and Astrida in the highest state of excitement, and, I was pleased to see, old Hansen was pleased and proud, and full of confidence. I called on Old Nyman too, and found that his interest in Svante had increased, though, he insisted, 'there is much difference between local reputation and real excellence. Let him see what he can do when brought into competition with the champions; it is likely enough that he will make a fool of himself and fools of us all.'

'It is something,' I pointed out, 'that Svante has shown his grit as well as the quality of his love for Astrida, and that he has made so great an effort to win her upon your terms.'

'Well, I admit that he has pleased me better this year than at any time before,' said old Nyman. 'We shall soon see whether he is a man among men. *Ski-hopping* requires nerve. I shall not be surprised if, when brought to the test, our friend Svante should find his courage fail.'

The great day came, and an immense crowd was assembled at the top of that magnificent Holmen-Kollen which stands guard over fair Christiania. I went with old Hansen and little Astrida, and Svante, pale but looking determined, was with us.

The exact procedure of the *Ski-hop* Competition is something like this: A platform of wood, strongly supported upon stout posts, or sometimes of piled snow, is built out some forty or fifty yards from the top of the steep hill upon which the competition is to take place. The competitors take their stand upon their snow-shoes at the starting-point at the summit. Then each in turn lets himself slide towards the platform, gathering pace as he goes, and from the edge of the wooden 'take-off' launches himself, still standing erect upon his *ski*, into space. He who can fly the farthest before touching earth, or rather snow, and, upon touching it, continue his course, still erect upon his *ski*, down the slope, is the winner. If he falls upon regaining earth after his flight, the 'hop' goes for nothing. The matter, as old Nyman observed, requires nerve, though an upset does not necessarily mean injury to the fallen, for the snow is usually deep and soft, and the awkward performer is not, as a rule, much the worse for his spill.

'Do your best,' I whispered to Svante, pressing his hand as he passed on to take his place at the summit. 'Remember, it is for Astrida's sake.'

'Yes; I remember it,' he murmured. 'From all I hear, there are about six present who have beaten my record; but the approach is steeper here than mine—that may add a few feet to my leap.'

The competition began, and a splendid sight it was—one to make the pulses race and the heart to thump.

Each man in turn flew like lightning to the level platform, shot into the air, flew like a great bird swooping downwards, alighting standing upon his snow-shoes, and sped onwards, the judges running in behind him to mark and measure his point of contact with snow-clad mother-earth. One or two fell, but were unhurt.

At the end of the first heat, Svante, who seemed nervous, was last but three, having covered but ninety feet. The leader, a well-known performer, Max Bernheim, had recorded one hundred and seventeen feet—a feat which had won frantic applause. Others had accomplished various distances, varying between ninety and one hundred and five feet.

At the second 'hop,' Svante, to his own surprise and our delight, making a tremendous effort, actually covered one hundred and fifteen feet, beating his own record by over three yards. The judges ran excitedly forward, announcing the result of their measurements amid the most intense silence, which was followed by roars of applause. Bernheim about equalled his first effort. No one else reached one hundred and ten.

I saw old Hansen rush wildly up to his son, as he passed going upwards, and embrace him. The sight evoked roars of laughter and applause. I also saw old Nyman shake his hand, and Astrida, crimson with excitement and her eyes like two stars, beamed upon him.

'Remember, Svante!' I shouted after him; and Svante looked back over his shoulder and smiled and

winked. The sight of that wink delighted me, for it showed that Svante had recovered his composure, and was master of himself once more.

Bernheim, the champion, looked with interest on Svante as he approached. 'That was a good hop for a novice,' he said.

And Svante (who repeated this conversation to me afterwards), replied: 'I shall do a better yet.'

To this Bernheim retorted: 'I am still thirty feet short of my record, which is also the world's record.'

'He frowned,' said Svante, 'when he said this; and when he started to make his third hop, I could see that he intended to make a terrific effort to leave every rival behind.'

Max Bernheim's third hop was a good though not a supreme one—one hundred and twenty-one feet. Svante made a supreme effort, seeming somehow to contrive to get a mysterious kick-off from the platform, which sent him flying through the air like a rocket. The tremendous impetus appeared to have overbalanced him slightly, so that his body was bent forward at a sharper angle than seemed safe. Would he keep his feet upon touching earth? I held my breath. It was a moment of intense excitement. Down came Svante, his *ski* perfectly poised and placed, but his body a trifle overbalanced. He tipped, lurched, wavered a moment, recovered, and sped on. The crowd breathed again.

'One hundred and twenty-three feet!' roared the judges.

Max Bernheim was far from considering himself beaten. He gathered himself up for an effort which should make Svante's hop seem ridiculously insignificant. With teeth set and body rigid, he sped away for his fourth attempt.

This time he left the platform with so tremendous an impetus that the people shouted aloud for wonder and delight. This hop would certainly leave Svante's modest attempt at least a dozen feet behind. But Bernheim's zeal had overstepped discretion. He had, indeed, put all he knew into his hop, but he had 'o'erleaped himself.' His body swerved in mid-air, lost balance before he touched earth, and, though he marked the snow some ten feet further than Svante's farthest, he alighted no longer erect upon his *ski*, but head-first, his *ski*-tipped feet in air, for all the world like a great bird which had been shot in mid-flight.

Well, Svante was acclaimed and carried home as champion *ski-hopper* of the year. You will find his name in the records at Holman-Kollen, and the rest you may imagine.

I stayed for the wedding, and presented Astrida with my gift. Old Nyman was gracious. He thanked me for 'making a man' of Svante; and pretty little Astrida thanked me also, so sweetly that—ah! well, Svante is a lucky fellow.

He wrote me lately. They are as happy, he tells me, as the days are long, and I am to come over and see their young hopeful, Harold, 'the future champion *ski-hopper*,' as he calls the child. 'We often say it was all owing to you that I won the competition and *her*,' Svante wrote; 'but what really did it was the sentence you drummed into my head, and which I repeated a hundred times that splendid day on Holmen-Kollen: 'For Astrida's sake!'



“Flying through the air like a rocket.”



"He beckoned just as if he were calling a cab."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 282.)

RISING to his feet, Teddy went to the bridge rail, shaded his eyes, and looked.

The horizon was hung with a pall of smoke; columns of smoke seemed rising out of the sea. One might have fancied a dozen volcanoes had suddenly pushed their heads out of the water, and were throwing their fumes up at the sky.

'What is it?' asked Marley, who had also come to look.

'I don't know,' replied the other; 'it's something very queer. Hurrah! I believe I know what it is!'

'What?'

'It's a fleet of battleships; it can hardly be anything else. Look! you can see the smoke from the funnels, those columns going straight up.'

As they watched, slowly and by degrees the far sea-line became broken and seemed in motion.

'It's a fleet of battleships, and they are coming this way!' cried O'Brien, greatly excited; 'they are hull down on the horizon, but you can scarcely see them because they are painted grey. Dick! if they are British ships, our fortune is made.'

'How so?' asked Marley, who, almost as excited as his companion, was gazing at the far sea-line, blurred and shaken and broken by the great fleet of advancing ships.

'Because they will give us help to get us to port, and they won't want a share of the salvage-money. The navy men never get salvage-money; it's all in their work.'

'Are you sure of that?' cried Marley, now as excited as Teddy.

'Sure? Of course I am.'

'But will they come close enough for them to see us?'

'They're coming dead on to us.'

'There's no fear of them running us down, is there?'

'No! those ships could dance a reel round us without hurting us—they're so perfectly handled. Oh! what am I thinking of? We must run up a distress signal—red duster upside down, half-mast.'

He rushed down to the flag-locker, got a merchant flag, fastened it on the mizzen signal halliards, and ran it up half-way. Then he rushed back to the bridge.

Even in that short time an amazing change was visible. The fleet was now in view spread like a fan, pouring its smoke to the sky, advancing like one solid piece of mechanism. It was like seeing a city advancing towards one across the water.

Then the fan seemed to close. The formation of the on-coming host had changed by magic, and the ships had taken their position in two columns 'line ahead.'

The impression produced on the mind of the gazers was that this vast Armada rushing towards them was a single body, expanding or contracting at pleasure, like the rings of a polyp; controlled by a single brain. It grew upon the water, till the hulls of the leading battleships became distinctly visible.

'The wind has died away,' said O'Brien in an agony, 'and the flag is hanging so that they can't see it's reversed—what on earth shall we do?'

'They will see it's at half-mast,' said Marley, 'and maybe they will know.'

Sloper had also come to the rail of the bridge, to see what was to be seen. He poked his head through, and drew it back, and chattered: his quick ear had no doubt heard the faint hum of the on-coming ships.

It was the Atlantic Fleet manœuvring in these waters: four battleships, four first-class cruisers, and a number of smaller vessels. They were making a course that would bring them by the *Kingfisher* with the port column only a pistol-shot away.

The flagship of the fleet led the port column; as she drew near, driving through the blue with a steady fountain of foam at the cutwater, and the tramping of her engines became audible, O'Brien felt somewhat as a costermonger might feel, whose barrow was about to get in the way of the Lord Mayor's procession.

He could see the vast bridge of the battleship, and the Admiral upon it, surrounded by officers, and the yeoman of the signals.

Then, as the great vessel drew abreast, he saw one of the officers turn a glass on the *Kingfisher*.

Now or never was his time.

He leaned over the rail and pointed to the flag half-masted; then he beckoned just as if he were calling a cab.

They were the most intelligible signals he could make, but they were evidently mistaken by the officer, who closed his glass, and turned to the Admiral.

Teddy groaned.

'Maybe the next ship will understand,' said Marley.

'Stay—look!'

The yeoman of the signals on board the *Canopus* had been at work; a strew of coloured bunting was suddenly run up on her signal halliards, the breeze she was making with her twenty-knot speed being enough to display them fully.

'She's signalling,' said Teddy.

The signal was repeated diagonally by a cruiser of the starboard column, and so down the line, but still the great ships went by, and neither halted nor stayed. The whole fleet passed, the wash of it causing the *Kingfisher* to roll gently, and the stanchions and cordage to creak and groan, as if bemoaning the hard-heartedness of man who could leave a poor ship to her fate like that.

But that is not the way in the British Navy.

The great fleet, under the dominion of a single brain, without halting or staying its course, had already thought the matter out and acted.

A destroyer detached itself from the starboard division, wheeled almost in its own length, came dashing at the *Kingfisher*, took a complete turn round her and drew up a cable-length off.

'Steamer ahoy!' came a voice from the destroyer; 'what ails you?'

'Send some one aboard,' shouted O'Brien in reply.

'We're derelict.'

In half a minute the destroyer had dropped a boat full of men, with an officer in the stern-sheets.

'If you wait a minute I will cast her off,' said

O'Brien, who was standing on the grating of the side companion-way.

He referred to the boat from Gommera that was still attached to the grating.

'Doesn't matter,' said the officer, a midshipman named Greg. 'I will get over her; we have no time to waste.'

(Continued on page 298.)

MEMORIES.

THE mind is full of memories
Of things that we have done,
And places we have visited,
And scenes we've looked upon.
And some of them are good and sweet,
And bring us pleasure true,
And some are memories of things
That we would fain undo.

Oh, if our lives are kindly lives,
Our memories will be
Like lovely pictures that are set
Within a gallery;
Or like a sky on summer days,
A vault of cloudless blue,
Where not a trace of storm is seen,
Nor dark cloud sailing through.

A HUNDRED YEARS AGO.

True Tales of the year 1808.

IV.—THE DISAPPEARANCE OF SOPHIA WEAVER.



HERE is the little lass? She didn't come to meet me as she generally does,' said John Weaver, a Somersetshire carter, as he returned home one autumn evening in the year 1808.

'Oh, she's somewhere about!' answered his wife, as she hurried to put the supper on the table. 'She went off blackberrying an hour or more ago; there's a fine lot of berries on the hedges this year.'

John said no more, for he was hungry and supper was ready for him, and it was not till he had made a hearty meal that he again thought of his child.

'It's getting dusk,' he said, as he stood in the doorway and looked across the fields towards Backwell. 'Sophia should be in by now. She's but six years old, and she will be scared if she has wandered far and the dark comes on.'

'Oh, she will be back directly, never fear!' said his wife; 'she never goes far.'

But the twilight faded into dark, and still the little girl had not returned, and now both John and his wife became alarmed, and one went one way and the other the opposite way, calling out loudly, 'Sophy! Sophy!' as they ran down the lanes and across the fields for a good distance.

Still no Sophia! The neighbours now became excited, and one man accompanied John as he set out to scour the country further afield.

'I will take my dog,' said the man; 'a dog is often sharper than we are.'

But neither men nor dog could find any trace of the missing child, though it was a fine moonlight night, when all objects were plainly visible.

'It's no good going further; she can't have strayed as far as this,' said poor John at length.

'Let's strike off home across the common; she might have got there; there are lots of bushes about.'

'One way is as good as another,' said John, sadly, and on they trudged, still calling out 'Sophy! Sophy!' at intervals, but only the deep silence came back to them.

They had gone some way when the neighbour suddenly found his dog was not following. He whistled, and a sharp bark was the response, but it sounded some distance off, and still the dog did not return, though the man whistled repeatedly for him.

'That's queer!' he said, looking hard at John in the moonlight. 'Let's see what that dog is after.'

'It will only be a rabbit,' said John; but all the same, he followed his friend, and by-and-by they came on the dog. He was standing by a thick group of blackberry bushes, and all round them the grass was much trodden down and trampled on.

'There's been some one here! Look at the grass,' said the man in an excited tone.

'There's no one here now,' said John in a weary tone, as he lunged about the bushes to be quite sure his child was not there. 'Hullo!' he continued in an alarmed tone, 'there's a hole here! I all but slipped down.'

'There's an old pit somewhere about here,' said his friend. 'I heard my father say men used to dig ore out in his day. It should be near here, too. Come round to the back, there are fewer bushes there; but go carefully, for these bushes hide everything.'

'You're right!' said John, prodding with his stick between the bushes at the further side; 'here are signs of digging, and it seems deep. Do you think the poor little lass could have tumbled down the hole?'

'Let's call her,' said the other, and the father knelt over the hole and called loudly; but again only silence. The dog, however, barked and capered round as if to encourage the search.

'I'm going down this pit,' said John, firmly. 'We will fetch ropes; it is the pit where they dug ore, and it will be a deep one. Please God, I will fetch the little lass out.'

It was now long past midnight, and before they could return with the rope, the dawn was flushing the eastern sky. The dog was still there, for he had refused to leave the spot, and now barked joyfully as he saw the men come up.

The men fastened the rope round John, and then he disappeared down the hole. It was indeed a deep one; they had let out about one hundred feet of rope before the strain on it ceased.

'He has found the bottom,' said one to the other, and the next minute came a faint shout from the depth.

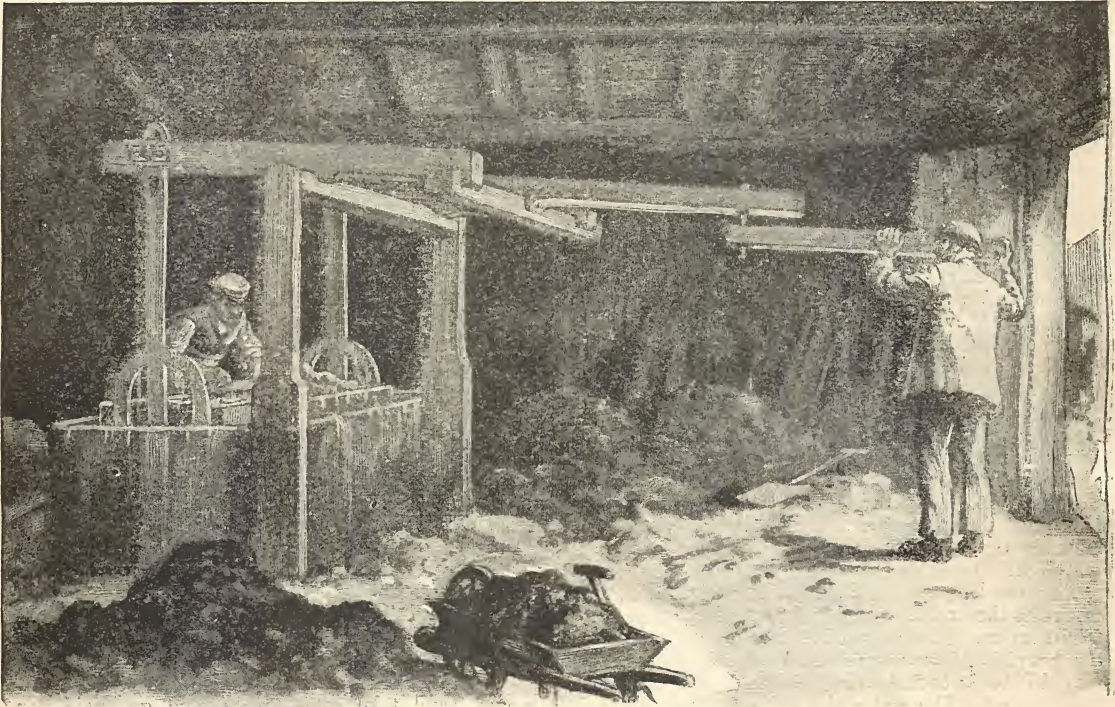
'Hurrah! hurrah!' shouted back the men, for John had agreed to shout to them if he found the child, and they rejoiced with him.



"He disappeared down the hole."

Eager hands now pulled at the rope, and it was well that others had arrived to help, for it was a stiff pull; but at last up came the man holding his

child in his arms, safe and uninjured save for a few scratches, and but little frightened, though she had been over fourteen hours deep in the earth.



An Ore-jigger at Work.

THE ORE-JIGGER.

THE ores of copper, lead, and many other metals which are dug up in England, are usually found in thin, irregular veins, which seem to fill up old cracks running hither and thither through the rocks of which the earth is mainly composed. It very often happens that the ore is only a portion of the materials which fill up the crack, but it is so intermixed with them that the miner cannot separate them as he works. He therefore clears out the whole of the crack, so long as he sees sufficient ore to repay him for his trouble. The whole of the materials thus obtained are carried out of the mine, and the first operation is to separate the useful ore from the waste rocks, shale, or earth with which it is mixed.

There are several ways of doing this, but in all of them the workman makes use of moving water, for reasons which will be clear to us when we have watched the workman at his work, and tried to think out what he is doing. The simplest way of cleaning the ore is to shake it in a machine called a 'jigger.' This machine is now rather old-fashioned, and there are others which do the work better. But it is still used, and it is of the simplest kind.

The ore-jigger is a long wooden beam, balanced on the top of a short post in such a way that it may be swayed up and down like a very long pump-handle or scale-beam. One arm of the beam is much

longer than the other, and the short arm is forked. An oblong box, about a foot deep, is suspended from the forked end of the beam by means of iron rods attached to each end of the box. In the bottom of the box, which is usually several feet long and nearly two feet wide, there is an iron grate, which forms a sieve. The box hangs in a larger box, or tank, which is filled with water, and has, indeed, a stream of water always flowing into it at one end and out of it at the other.

The materials from the mine, ore and waste alike, are broken into small pieces about the size of nuts, either by a hammer or by some kind of stamper or crusher, driven by a water-wheel or steam-engine. The sieve-box of the jigger is filled with crushed materials, and a workman seizes the long arm of the jigger and moves it up and down, as if he were pumping. This movement shakes the contents of the box, and washes the water in and out through the sieve at the bottom. After a few minutes of vigorous shaking, the broken stone and shale, which were mixed with the ore, now lie at the top of the box, and there is practically no ore mixed with them. If the waste is mostly at the top of the box, the greater part of the ore must be at the bottom; and if we were to dig carefully down to the sieve we should find that the contents of the box could be roughly divided into three layers. At the bottom there is pure ore; at the top there is nothing but waste; while between them there is a band of mixed ore and waste.

This arrangement of the contents of the box is so certain and regular that the workmen can regulate their actions by it. While the man moves the long arm of the jigger up and down, a boy attends to the box, and separates the waste from the ore. With a flat iron scraper he scrapes the top layers of stone and rubbish to one side of the box, lifts them out, and throws them on the ground. He is careful, however, not to disturb the middle layer of mixed ore and waste.

The box is now filled up with new material and 'jigged,' or danced, once more, with the same result as before. Thus the jigging goes on until the box is so full that some of the ore remains at the top. When that occurs the box is emptied. The layer of mixed ore and waste is put in one little heap, and the clean ore in another. The latter is ready for the smelter, who will put it in a furnace, and thus separate the pure metal. The mixed material is, however, returned to the box along with new material from the mine, and jigged again until a new layer of clean ore is deposited on the sieve. A portion of the finest ore falls through the sieve and into the bottom of the water-tank. From time to time this is taken out, and washed by an operation differing but slightly from that already described.

The question may be asked how it is that the jigger separates the ore and other materials into their different layers. The answer is that the ore is always the heaviest of all the materials, and whenever it is moved it tends to fall more quickly, and to reach the bottom first. The water aids this operation in three ways. Firstly, the wash of the water helps to move the contents of the box. Secondly, everything which is placed in water loses some of its weight, being borne up to some extent by the water; hence the ore and waste are lighter in water, and are in consequence more easily moved. The third way is a little more difficult to understand than the others, but it is worth an effort to master it. The water takes away the same weight from every body which is of the same size, and this makes the heavy ones heavier in proportion. If, for instance, there were in the box of the jigger a piece of wood weighing rather less than an ounce, a piece of stone weighing two ounces, and a piece of ore weighing four ounces, and if the water took away one ounce from the weight of each, the wood would lose all its weight and float; the stone would weigh one ounce, and the ore would weigh three ounces. The ore, which was only twice as heavy as the stone, when weighed in the air in the ordinary way, becomes three times as heavy as the stone when the two are placed in the water, and, therefore, it falls to the bottom more quickly than it would if the water were not used. But this is only true so long as the pieces are about the same size, and it is for this reason chiefly that the materials from the mine are so carefully broken up.

W. A. ATKINSON.

THE FIRST CUP OF TEA.

THOSE of us who like tea feel thankful that we did not live in those dark ages when there was no tea in England. The first cup of tea drunk in this country is said to have been made at Arlington

House, which occupied the site of the present Buckingham Palace. The Earl of Arlington bought the tea in Holland, where he gave sixty shillings a pound for it! The Earl must have appreciated tea far more than did a certain German writer, who in 1633 described it as 'black water with an acrid taste.' Mr. Pepys, in his famous Diary, records the drinking of his first cup of tea on September 25th, 1660.

'PHOTOGRAPHS WANTED.'

GORDON saw difficulties in the way, of course. He always seems to see things from the wrong side. He said, 'Well, read it again,' and he tilted back his chair, and only kept himself from falling by catching the ledge of the table with his toes.

So I read it again. 'It is called "Photographs Wanted,"' I said, 'and it says, "All photographs accepted will be paid for." It says, "Photographs must be non-copyright," whatever that is; and it says, "The Editor invites contributions of photographs of curiosities and uncommon objects." That's what it says.'

'You read it backwards,' Gordon said.

'I began with the most important part,' I told him, 'about the payment.'

'Well, go on,' he said, quite coolly, as if I had nothing to be annoyed about. 'What are we to do?'

'Buy a camera,' I answered, deciding not to argue, 'and take some freaks and get paid for them. It's as easy as winking.'

He didn't look a bit convinced, and he said we knew nothing about photography; but when I showed him the camera advertisements, he admitted it seemed easy enough there.

'But it won't be as simple as it says,' he said, and that was so like Gordon.

'Well, I suppose we can tackle it, if it is difficult,' I answered. 'Stent can take photos, and if he can, it ought not to be much of a poser for us.'

Gordon agreed to that cordially. Stent is simply silly in his work, especially Latin, but he has two cameras, and does ripping photos. Gordon is not specially good at Latin either, but he beats me hollow in some things, arithmetic for one, and some others.

I said, 'We have enough money for a five-shilling "Brownie." That will cost us five shillings.'

Gordon said it would cost far more than that. I asked how? I told him Morrison (the chemist in our village who sells them) could be put in prison if he overcharged a thing that had five shillings written on it. But Gordon shook his head in a calculating sort of way, and said that before we were done with all the extra things we should need, we should be in for seven-and-six. He said we should need dishes, and chemicals, and all that. I had forgotten there was anything more than just the camera, but I remembered Stent had rows of bottles and stuff.

So we asked Marga to lend us the half-crown she got on her birthday, and when I told her we would pay her in about a fortnight, when the editor took our things, she did not mind.

Gordon said, 'If he does!' which was just like Gordon. He is frightfully slow about believing things, and never does anything he thinks of at the moment he thinks of it. No one would believe we were twins.

We ran down to the shop, and the man, Morrison, frowned rather when we went in, and moved a scent-squirt he kept on the counter right behind him. But when we said we thought of buying a camera, he looked pleased and almost smiled. We looked at some beauties, and got him to explain all about them. One was five guineas, and we asked specially about it, and worked the shutter thing scores of times. Then we said it was a five-shilling 'Brownie' we wanted, and he was very cross, I must say, and said we should have told him earlier, and he would not have spent so long over the others. But Gordon told him we didn't consider it a wasted hour, as it was the holidays. Morrison didn't seem to like that, and Gordon was angry with me for giggling. He always says a thing like that without looking as if he thought it funny, but I can't. I have to show it when I feel it.

We got the 'Brownie.' Gordon was right. Morrison made out a list of things about a mile long that he said we ought to have. It came to about fourteen shillings altogether. We paid him seven-and-six, and said we would pay the rest when we got some money we expected in a fortnight. He didn't like it, but we told him he should be thankful to have seven-and-six cash down; and he said he was, very.

The next thing was to photograph a curious object. Gordon thought we should take Morrison removing the squirt (it's a jolly bottle, and sends out a regular smoke of scent when you squeeze the ball), but I didn't think the editor would think that particularly funny, unless, of course, he knew Morrison. We snapped a broken snail that had been crushed by a cart-wheel. It was very curious, not a bit like a snail. Of course we held the camera quite close, because a snail is so small a thing to photograph. After I had done it Gordon remembered that Morrison had said not nearer than four or five feet. However, Morrison must be wrong, because, how could you take a snail four or five feet away? We didn't see it ourselves till we were just on it.

Well, we looked everywhere for freaks, and couldn't see a single uncommon object anywhere. Then Marga thought of a very clever thing. She said, 'Take a hen laying an egg!' (We have fifteen hens.)

But Gordon thought that silly. He said, 'A hen laying an egg is one of the commonest things in the world.' And of course he was right in a way. Then he said, 'If we could find one laying an egg in Father's boot, or something like that, *that* would be a curious object.'

'Well, get Father's boot and hold a hen there till it lays,' said Marga. And we thought that a ripping idea.

'You fetch the boot and we will catch the hen,' said Gordon to her; and we went to the hen-run, and had a capital time. The noise there was! We

got a light-yellow hen at last. We chose it to make a contrast, which is one of the things to remember in photography, Morrison had told us. Marga brought one of Father's big fishing-boots, that go up to his knee, and we stuck it up against the coal-house door, which is painted green. The background is very important, Morrison had said. Marga thought the hen ought to have something soft to sit on, and we got straw, any amount, and stuffed the boot full. Then Gordon put the old clucker down, and held her there while I got into position, and tried to remember all Morrison had told us about distance and height, and so on.

Marga wanted to wait till the hen had laid an egg, which would probably not have been till the next day; but Gordon explained to her that the editor wasn't to know it wasn't laying one, and he said we could pretend that this hen was such a pet of the family that it liked to be stroked while laying. He said the editor would have to admit it was a curiosity. It really was a savage beast, and was pecking Gordon so hard, and twisting about at such a rate, that I never could get a chance to take it properly. But Gordon held on and Marga helped, and I was just going to snap when I heard Father shouting out about his boot.

We called to him where it was, and he came. Stent was with him. We had quite forgotten that Stent had promised to come up one afternoon to photograph Marga's Persian kitten. Of course he had his camera, and he told me I was doing all right, but Father laughed so much I was *rather put out*. Gordon told Father why we were doing it, and why he could not have his boot till we had finished with it. But he laughed on till I was so angry I could have pitched the camera at him.

At last I told Gordon I had exposed all the films, and probably most of them would be worth something, so he let the hen go, and Father, still grinning, told us to hurry up and clean out the boot, for Sir Frank (Stent's father) was to meet him at the river. Then he gave us each half-a-crown, and told us to pay Morrison with the money.

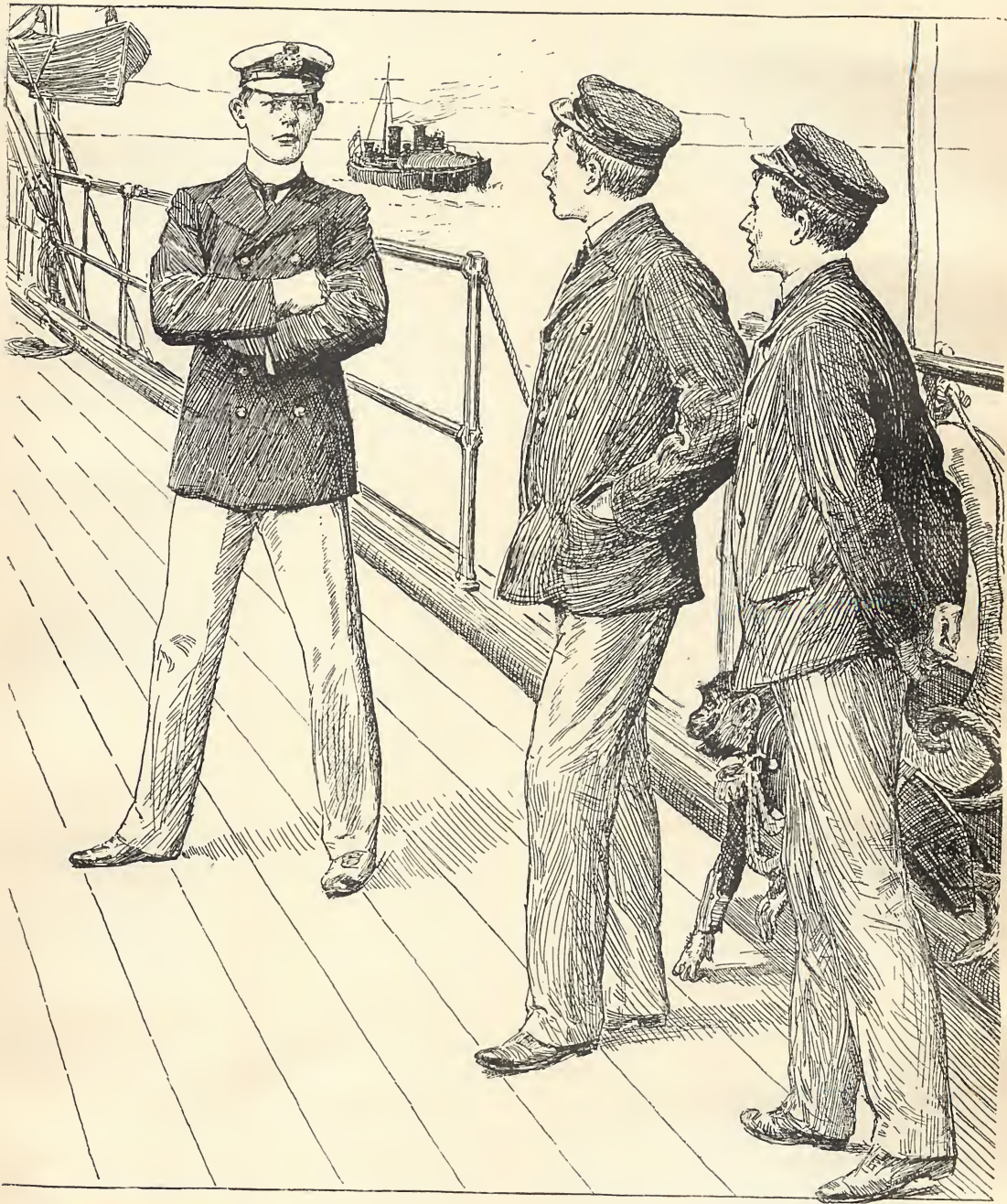
Well, we developed the roll that night, Gordon and I, and we did exactly what the book said (Morrison gave us a book about it, I forgot to say), and we got into a fearful mess. But all that came out was black smudges, with no sign of the hen, or the boot, or Gordon, or Marga, or the snail, though we stayed so long trying to make them come right that Mother came three times to the bathroom door to tell us we ought to have been in bed long ago; and then Father came with her, so we had to stop.

It was the greatest sell you ever heard of. But in the end we did get some money *out of it*, because Stent had photographed us when we were doing it, and that was partly what amused Father so much. Stent had a big camera, and his photo was simply splendid—everybody and the hen quite clear and separate. He sent it to the magazine, when he heard ours were failures, and he told the editor what we were doing it for—and he got it taken and five shillings for it. He gave us half, which was jolly decent of him.

But we are not going in for any more competitions like that one, for you have to spend so much more than the prize to start with that it is a dead loss.



"I never could get a chance to take it properly."



“‘Don’t answer him, Teddy,’ said Marley.”

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 291.)

THE midshipman climbed over the boat, got on to the grating, and followed O'Brien up the steps. O'Brien noticed that he omitted to salute the quarter-deck, as is usually done.

'Where's your captain?' said the midshipman, glancing about the deserted decks.

'Whose captain?' replied Teddy, whose Irish temper was ruffled by the other's superior manners and arrogant ways.

'Whose?—why, yours—where's the captain of the ship?'

'I don't know if you have come aboard to ask riddles or not,' said O'Brien; 'but I have no time to play with you. I signalled because we want help. We're derelict. At least, the ship was derelict till I salvaged her—I and my companion here, Mr. Richard Marley. There is no one else on board. We want help to take the ship to port—do you see?'

Mr. Greg did not seem to relish this style of address, and stared wrathfully at O'Brien. He was a freckle-faced middy with a snub-nose, a regular fighting face.

'Why,' he burst out swelling himself up like a turkey-cock, 'we don't want to answer riddles, don't we? I ask you again, where's your captain, and mind how you answer, for your reply may be used against you when you come before the Board of Trade.'

Marley, who had been standing by all this time feeling very wrathful at the insolent and overbearing manner of the middy, now put in his oar.

'Don't answer him, Teddy,' he said, speaking in a quiet voice and as if Mr. Greg were a hundred miles away; 'he will have to give us help anyhow, and he's not the Board of Trade.'

Now, Greg was a gentleman, and had the makings of a fine officer in him; but he had not long left the *Britannia*, and was only just beginning to learn the world. He was opening his mouth to make some remark, when a powerful voice from the destroyer, speaking through a megaphone, hailed the ship.

'Steamer ahoy! are you asleep there?'

'Ay, ay, sir!' shouted the middy, and without a word he bundled down the steps into the boat, which made for the destroyer.

In a few moments the boat was back with a naval lieutenant in her—the destroyer's commander, in short, a business-like and bronzed man with no nonsense about him, an epaulette at his shoulder and a sword at his side.

'What's all this?' said he, coming aboard, sweeping his eyes round the deserted deck and addressing Teddy.

'We're derelict,' replied O'Brien. 'We are the cable-ship *Kingfisher*. There has been a mutiny; every soul was off the ship yesterday, and she was floating by herself when my companion and I, who had taken refuge on Gommer, collared one of the native boats, came off, and boarded her. There's a boiler-tube burst, but otherwise she is right and tight.'

'Why couldn't you have told my midshipman this without cheeking him?' demanded the lieutenant.

'Well, he began the business,' replied O'Brien. 'He came aboard in such a way, I lost my temper.'

'Well, if you have an injury that can be repaired, my engine-room artificers will be able to repair it. I must stick by you, anyhow, till you're in port, for I have scarcely enough stokers to serve my vessel and yours. We will put you into Teneriffe harbour.' He went to the side of the ship and ordered the boat away for the engine-room artificers.

'If you will excuse me, sir,' said Teddy, who had now quite regained his temper; 'but I intend to claim salvage for the ship, and I must ask you to bear witness of the truth of the statements I am going to make.'

'Well, you're a cool youngster,' said the lieutenant. 'Salvage, are you?—and do you mean to tell me you have salvaged the ship?'

'That's what I wish to prove to you, sir, if you will come on the bridge first.'

The lieutenant followed O'Brien to the bridge.

'Away over there, sir,' said Teddy pointing to a faint cloud-like shape to eastward, 'lies the island of Gommer.'

'That is so.'

'Now, if you look intently you will see, between here and Gommer, a spine of rock sticking out of the sea.'

'Oh, yes, every navigation officer knows it, it's the Hamar Rock; the brute ought to have been light-housed or blown out of the water long ago.'

'Now, sir, the current we are drifting on comes straight from Gommer, past the Hamar.'

'Yes.'

'Well, this morning, going to take an observation on the bridge, I found we were drifting straight on to the Hamar—'

'A moment,' said the lieutenant, who was becoming interested. 'I had better take these statements down in writing.'

He first went to the bridge-rail and called out an order to his coxswain, who had come on board, to tell the artificers, when they arrived, to inspect the engines and boilers, and report.

Then, sitting down on a deck-chair and taking a note-book and stylograph pen from his pocket, he entered what O'Brien had already told him.

'Now heave ahead,' said he.

'I found we were drifting on the Hamar; it was a quarter of a mile away dead on, and the wind was blowing a fair breeze from the southward.'

'Fair breeze from the southward,' wrote the lieutenant; 'yes, go on.'

'I ran forward and shook out the jib. I then attached a tow-rope to the capstan, and flung the end overboard; I then ran aft with my companion, Richard Marley, and we cut the seizings of the wheel, jammed it hard a-port and fastened it so. We then got in the boat we had collared from Gommer, rowed forward, took up the free end of the tow-rope and fastened it to a ring in the stern sheets of our boat; then we towed at the ship's head to get it pointing away from the rocks. I don't say we made any tremendous effect, but I can tell you this, sir, when the ship passed the rocks, she shaved them by not more than a couple of feet, and between the jib and the wheel fixed the way it was, and us towing, we had given her at least as much help as that.'

'In short,' said the lieutenant, 'you claim that your exertions saved the ship?'

'Exactly.'

'Well, I don't say they haven't, but, as this affair will involve thousands of pounds, I'll come and verify your statements.'

They went first to the bows, and there, sure enough, was the tow-rope still fixed to the capstan; then they went aft, and there sure enough was the great wheel jammed hard a-port and lashed so.

Then they went to the side steps, and the lieutenant inspected the boat from Gommern.

'You took this boat from one of the islanders, you say?' he inquired as he came up the steps again.

'We stole it from two blind men,' replied O'Brien. 'Didn't we, Marley? But I think, when you hear the story, you will see there was nothing mean about the theft.'

'That's just what I want to hear now, the whole explanation of the mutiny; but first I will inquire about the engines.'

One of the engine-room artificers had come up, and he was standing by the engine hatch, waiting to be questioned.

'Well, Davis,' said the lieutenant, 'what do you make out?'

'There's a burst tube in No. 4 boiler, sir; but I can cut it off from the rest.'

'How long will it take?'

'About a four-hours' job, sir.'

'Are the engines all right?'

'Yes, sir.'

'Then get to work.'

'Ay, ay, sir,' and the man vanished down the engine-room stairs.

'Now, you two,' said the lieutenant, whose name turned out to be Graham, 'come along somewhere and tell me the whole yarn, and let's get to the rights of the matter.'

O'Brien led the way to the chart-house.

(Continued on page 306.)

NATURE AT HOME.

Some Every-day Habits of the Animal World.

II.—WINTER SLEEPERS.

IT is quite surprising, when one comes to think of it, how tremendous a part food plays in the lives of birds and beasts—and in our own also, for the matter of that. All alike must eat to live, and it is just this 'must' which makes all the difference. Since the desire to live is unquenchable and the demand for food so strong, long and often perilous journeys have to be taken to procure that food, and the nature of these journeys we have already told.

We are now going to unfold another, and a very curious, aspect of this story of how animals contrive to escape starvation. We say 'curious,' but perhaps remarkable would be a better word; since, at first sight, we shall seem to contradict flatly the statement just made that animals *must* eat to live. We are now going to describe a number of animals which succeed in passing many weeks, or even months, without eating a morsel of food! These are the creatures which 'hibernate,' that is to say, which at

the approach of winter, fall into a profound slumber. This device they have adopted because, being unable to migrate, they would otherwise starve, their natural food-supply having dried up. But though, for weeks on end, no food passes their mouths, yet they do not starve, because, before the deep sleep came upon them, they made the most of the time of autumn plenty, and ate, and ate, all day long, thereby becoming enormously fat; and this fat is slowly used up by the body to support life during the long fast.

One of the heaviest and soundest sleepers of them all is the little brown dormouse. Just as the trees are putting on their autumn tints the dormouse builds himself in a hollow tree, or in some thicket well sheltered from the wet, a most delightfully cosy nest of fine grass, leaves and moss, and round as a ball. Having first laid up a store of food in case a spell of mild weather should wake him up, he creeps into his winter house, and curling himself up into a ball, drops off into the soundest of sleeps, which may last for many months, if the winter be severe. But a warm day rouses him to life again, when he slips out for a meal, having, as we said, providently laid by a store of nuts for this purpose.

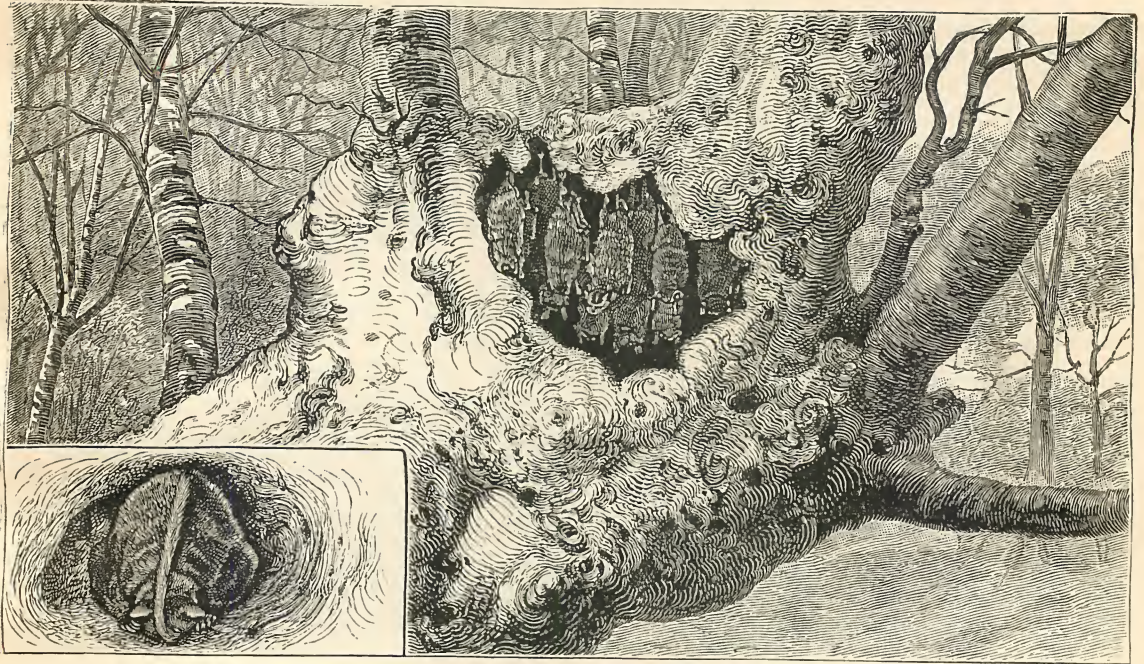
The hedgehog, the squirrel, and the bat, similarly, as winter makes itself felt, seek out some dark and cosy nook, in the hole of a tree, or elsewhere, and like the dormouse, drop off to sleep. Winter storms, and frost and snow, have no terrors for them. They wake when the flowers wake, at the touch of the warmth of the sun when spring has really come. The illustration shows the cosy shelter of the bat and the dormouse, as they would look if we could break away the outer wall of their retreat. Of course in Nature only a mere crevice in the bark would show where the entrances to these sleeping-chambers were.

Far away in the wildest parts of Europe, the brown bears, in like manner, sleep away the winter months, comfortably curled up in some dry cave, such as is shown in the lower half of the illustration; but the mouth of the cave would of course in reality be closed up. Further still, in the wild Arctic regions, the Polar bear lies down by some sheltering drift, at the first big snowstorm. In a very little while that bear is covered by many feet of snow, and remains a prisoner till spring. The warmth of the creature's body soon melts the snow which originally covered its fur, so that it passes its winter sleep in a sort of cave, from which all draughts are shut out. The only air-space, indeed, is a small funnel, caused by the ascent of its warm breath.

The frogs and toads, too, escape the harsh hand of winter through the doorway of sleep. So soon as the cold weather comes, they retire to the bottom of some pond or sluggish stream, and burrowing down into the mud remain in a state of torpor till awakened by the genial warmth of spring.

Even some of the cold-blooded fish adopt this plan of passing the winter months. The carp and tench, for example, retreat to holes in the mud at the first touch of frost; only in this way, indeed, could they escape the cruel grip of the ice when the stream is frozen solid.

But our list of the winter sleepers is not yet



Bats, Dormouse, and Bear in Winter Quarters.

exhausted, for many kinds of snails, and some kinds of butterflies, for instance, pass this time, so fraught with hardships, in the garden of sleep.

Our common garden snail, and its larger relative the edible snail, for example, both hibernate, burying

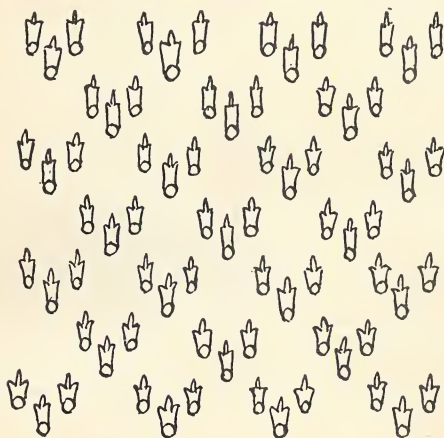
themselves in some sheltered place. The better to keep out the cold, they form a thick lid or door, either of hardened slime, as in the common snail, or of chalky matter, as in the edible snail, which completely closes up the shell.

Most of the butterflies die before winter comes, but some species, like our native Tortoise-shell, Painted Lady, and Red Admiral, if hatched during the autumn, retire to some sheltered nook, and there await the joyful spring, when, like so many 'Sleeping Beauties,' they emerge to gladden our eyes, and remind us that summer is at hand.

W. P. PYCRAFT, F.Z.S., A.L.S.

CALICO PRINTING BY HAND.

MANY years ago a poor old man died in a little cottage in a small town in the North of England. He appeared to have no relatives, and the few household things which he possessed were sold by auction shortly after his death. One who had known the old man, and had sometimes been interested in his talk of bygone times, bought at the



A Fleur-de-Lys Pattern for Calico.

sale a few sheets of paper covered with patterns, which the old man had drawn. I have these papers before me as I write, and I think that, when you learn what they are, and for what purpose they were made, you will be interested in a kind of work with which you may not be familiar.

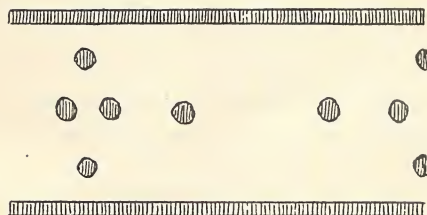
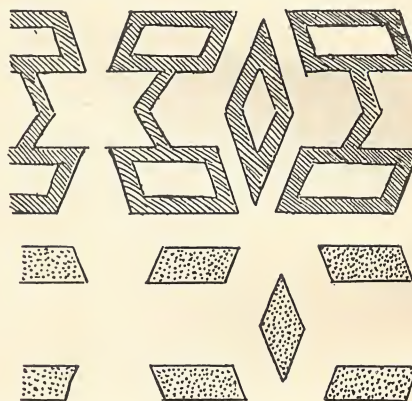


Fig. 1.

The papers are small sheets, the largest not more than a foot or so long, and not quite so wide. One of them is a sheet of drawing-paper, but the rest are made of that thin, transparent kind known as tracing-paper. Upon each sheet there is a pattern, which is usually about five inches long and four

inches wide. These patterns are very similar to those which we see upon printed calico or cotton cloths, and, in fact, they are the old man's designs for such cloths. It was his work to invent new patterns, and sketch them in this way upon paper. He sold them to the manufacturers of printed calicoes as an artist sells his pictures to a picture-dealer.

Some of the patterns are drawn with a lead pencil, and the old man's intention was that these should



Figs. 2 and 3.

be printed in black or in a single dark colour upon a white or pale-coloured ground. The designs are very small, but they are so arranged that they may be repeated in all directions. You will notice this peculiarity in almost all printed cloths. The repetition of the pattern in this way saves a great deal of labour and expense, and it has also this advantage, that the cloth may be cut up into pieces of any size without utterly spoiling the pattern.

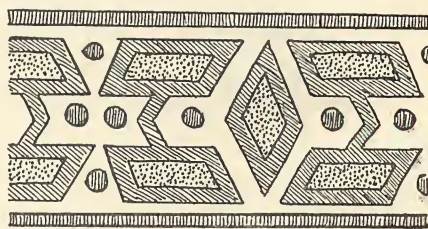


Fig. 4.

Four of the designs for a border here given are so arranged as to fit one into the other, thus allowing each part (figs. 1, 2, and 3) to be printed in a different colour. By this means a very considerable variety may be secured. Suppose fig. 1 is printed in red, fig. 2 in brown, fig. 3 in pale blue, you would then have an effective border (fig. 4) in three colours; or fig. 4 can be printed in one colour.

At the present time all, or nearly all, the printing of cloths is done by machines, which bear considerable resemblance to the machines which print newspapers or books; but forty or fifty years ago much of this kind of printing was done by

hand, and this is the operation which I wish to describe.

When the manufacturer has selected a design for his calico, he hands it to a draftsman or engraver, who makes a copy of it on a smooth block of box or some other hard, close-grained wood. The block is about twelve inches long and eight inches broad, and the draftsman is careful to make the pattern cover the whole of the block by repeating a part of it if it be necessary to do so. Having transferred the design to the block, he cuts away all the uncovered parts of the wood (called solids), leaving the inked parts standing, so that when he has finished his work the raised parts of the block present a copy of the designer's pattern.

The cloths to be printed are woven in long lengths, and a number of these are sewn end to end, and wound on a large roller. The printer works at a long, flat table, drawing the cloth from the roller on to the table as he requires it, and when it is printed it passes on to another roller, upon which it is wound again. Near the printer, as he stands at the table, is a bowl of colour, into which a boy or girl dips a brush from time to time, and spreads the colour upon a soft woollen cloth. The printer, having fixed a handle to the back of his engraved wooden block, commences work by pressing the face of the block upon the smeared cloth, and taking up a supply of colour. He next applies the face of the block to the calico to be printed, taking care to begin in one corner and to set the block straight with the edges of the cloth. He then gives the back of the block a slight blow with a light mallet, and when he withdraws the block he sees upon the calico an impression of the engraved block. He dabs the block into the colour again, and makes a new impression to join up to the end of the first one. The adjustment of the block requires great care, because there must be no space between the two prints, nor must they overlap. They must join up so nicely as to appear to have been printed from one large and perfect block.

The rest of the work is a constant but careful repetition. The printer works a row of impressions across the cloth, then begins a new row by the side of the first, and thus goes on until all the cloth is covered.

This is the way in which the old man's pencilled designs were intended to be printed. But some of the patterns, as we have seen, are in several colours, and in that case *each colour* would require a block to itself. On the first block the red parts only would be drawn and left standing, the rest of the wood—whether blue, brown, or green—in the design being cut away. On the second block the brown parts only would be left, and on the third block the blue only.

The printer, taking up the first block and dabbing it in red colour only, would print upon the calico the red parts of the pattern. When this was dry, he would take up the second block, and, using brown colour, would print the brown pattern on the top of the red one. When I say upon the top, I mean that the position of each separate colour block is so carefully adjusted that the impression would be printed to correspond exactly to the pattern drawn and coloured by the designer. W. A. ATKINSON.

THE NUTHATCH.

WHEN we are walking through a wood or shrubbery, we are likely to hear the call-notes and notice the birds that resort to such places. Many a boy and girl has, doubtless, seen a grey bird with a breast of orange, a rather plump fellow, moving up and down the tree-trunks, usually those grown over with moss or lichen. Its call-note is only 'Twit! twit!' not much of a song, but it gives the listener the idea that the bird is thoroughly happy. We call this bird the nuthatch, for a very good reason, but hunting nuts is not his usual employment. During the summer months he is searching, tapping and pecking amongst the trees, never idle, intent upon obtaining food for his young family as well as himself. He hunts for small caterpillars, grubs, and little beetles, and sometimes, to obtain these, he swings head downwards from a branch or tree-trunk.

Later in the year, when autumn arrives, and the young birds are able to feed themselves, the nuthatch is occupied in another way. Now for awhile he becomes a vegetarian, and is busy in pursuit of nuts; especially he seeks filberts and cob-nuts amongst the shrubs or hedgerows. Sometimes he stores acorns or beech-nuts. But it is one thing to get a nut, and another thing to obtain the kernel from it, so, having seized a nut in his large beak, the nuthatch goes off to some tree. The bird looks out for a cleft or hollow in the trunk, and there he puts his prize. If we approach him cautiously we soon hear a sharp tapping; he is hammering away upon the nut with his bill, clapping his wings while he does this. Presently the hard shell gives way, and he gets the nut, which he flies off to eat in some quiet corner.

But the nuthatch is a wise bird, and evidently thinks of the time when few nuts will be left in the bushes. So, like the squirrel, he is a hider of nuts, though whether he always remembers where they have been put may be doubted. He chooses a variety of places for his store; it may be a chink in a wall, the corner of some gutter, in a clump of moss, amongst loose stones, perhaps in a garden flower-bed. He hunts them in late autumn and early winter, when insects are few.

J. R. S. C.

WHAT THE SUN HAS SEEN.

WHAT have you looked on? Tell me, do,
O glorious sun, that lights the dew.
The mountain summit feels your beam,
And so does every fenland stream.
You catch the white clouds as they pass;
You touch with gold each blade of grass.
It matters not how large or small,
O gracious sun, you light them all!
But when I pulled my blind aside
And saw you o'er the hill-top ride,
I was not thinking of to-day,
But other mornings, far away.

How strange to think your wealth of gold
 Shone down upon the world of old,
 And shepherds woke to see it shine
 On lovely hills in Palestine.
 You've seen, from those unchanging skies,
 Past nations into greatness rise,
 And, never stopping, day by day
 You've watched them sink and pass away.
 You've seen the deeds by heroes done
 In all the ways that fame is won;
 For the same light this morning shed,
 Once touched the sail Columbus spread,
 And o'er the unknown waters shone
 To lead him on, and on, and on.
 Another day you peeped between
 The shutters of a window mean,
 And in a room of dinginess
 Saw William Caxton's printing-press.
 The story of the world you know,
 In every corner, high and low.
 With rainbow tints your light is thrown
 On icebergs in the frozen zone;
 And with a warmer lustre smiles
 On blossoms in the coral isles.
 The Himalayan heights sublime
 Your morning rays with swiftness climb;
 No ocean's wild and leaping spray
 Has ever checked your onward way;
 For lands and seas you cross them all,
 As my wee shadow mounts a wall.
 And now you're come, I'm glad to see,
 To spend a summer day with me.
 The skies are bright, the clouds are few;
 I'll let you see what I can do,
 And while you pass from East to West,
 I'll try to do my very best.

JOHN LEA.

THE GUILDHALL GIANTS.

GOG and Magog are the names given to two reputed giants whose statues are erected in the Guildhall in London.

The story of these giants dates back to the very earliest ages of our country. Caxton, in his *History of Troye*, the first book printed in England, seriously prints what the old authors no less seriously wrote about the first peopling of our island.

According to the legend, the Emperor Diocletian had thirty-three wicked daughters; they having all murdered their husbands, he sent them to sea in a ship with only provisions for half a year. The ship drifted to Britain, and here the daughters married demons, and had giants for their sons. One of these giants was named Albion, and he ruled the island until the arrival of Brutus of Troy, who wished to wrest the kingship from him. Upon this Albion gathered together his followers, men of gigantic stature, 'bearing for their arms huge clubs of knotty oak, battle-axes, whirl-bats of iron, and globes full of spikes fastened to a long pole by a chain'; and with these, Albion at first defeated the Trojans and forced them to retire.

But Brutus, though defeated, was not conquered, and, seeing the disadvantage his men suffered in

being opposed to Albion and his giants, he resolved to overthrow them by stratagem. One night he caused a long, deep trench to be dug, at the bottom of which were sharp stakes; this trench was covered over with boughs and rotten hurdles, on which he caused to be laid dried leaves and earth, which completely concealed the trench. But some firm passages, well known to his own men, were placed across the trench; and now, having made his preparations, Brutus dared the giants to a second battle.

Albion and his men were nothing loth, feeling that the victory would again be theirs; and they were more certain of it than ever when they saw Brutus and his men retreating before them.

But this retreat was merely a feint to lure the giants across the treacherous trench; they fell headlong into the trap prepared for them, and became an easy prey. Albion was slain in a hand-to-hand conflict with Brutus, who also captured Albion's two brothers, Gog and Magog, giants of huge stature, and led them in triumph to the place where London now stands. Here Brutus built a palace on the present site of Guildhall, and caused the two giants to be chained to the gates as porters.

In memory of this, it was said, their effigies, after their death, were set up as they now appear in the Guildhall. So runs one story.

But another account gives other names to these giants.

The name of one should be Gogmagog, as one word, as it is still preserved in the Gogmagog Hills in Cambridgeshire. This is the giant represented with the 'globe full of spikes fastened to a long pole by a chain.'

This globe was a common weapon in early times, and went by the name of the 'Morning Star.' It was used by horsemen to whirl about and break the armour, or otherwise injure the fighting men.

The giant represented with this strange weapon, and with the quiver of arrows at his back, is, correctly speaking, Gogmagog, and the other is Corineus, who is dressed in what was then popularly supposed to be Roman armour, and carries the shield with the Roman eagle, the two figures thus representing the conquered and the conqueror.

Corineus is supposed to have been the brother and companion of Brutus, and it is said by some writers that he, and not Brutus, was the slayer of Albion.

In an old play Corineus is represented as saying:—

'When first I followed thee and thine, brave King,
 I hazarded my life and dearest blood
 To purchase favour at your princely hands;
 For this I fought with furious Gogmagog,
 A savage captain of a savage crew;
 And for these deeds brave Cornwall I received—
 A grateful gift given by a grateful king;
 And for this gift, his life and dearest blood
 Will Corineus spend for Brutus' sake.'

The exact origin of the legend, however, is unknown.

(Concluded on page 306.)



Gogmagog, the Guildhall Giant.



Corineus, the Guildhall Giant.

THE GUILDHALL GIANTS.

(Concluded from page 303.)

GIANTS were in early days always held in great favour with the populace, and, of course, the City giants could not be overlooked in the civic festivals.

At the Lord Mayor's Shows, or on those occasions when there was a royal progress through the City, the giants of the Guildhall would, without fail, be fetched out to keep 'watch and ward' at the City gates.

In 1415, when victorious Henry V. entered the City, Gog and Magog were duly there to welcome him; when Philip and Mary made their entry in 1554, the giants were stationed on London Bridge; and when Queen Elizabeth visited the City the day before her coronation, an old writer tells us, 'Temple Bar was finely dressed with the two giants, Golmagot the Albion and Corineus the Briton.'

At the Lord Mayor's Show in 1672, Jordan, the City poet, thus describes the day: 'I must not omit to tell you of two exceeding rarities to be taken notice of, that is, there are two extreme great giants, each of them at least fifteen feet high, that do sit and are drawn by horses in two several chariots, moving, talking, and taking tobacco as they ride along, to the great admiration and delight of all the spectators. At the conclusion of the show they are to be set up in Guildhall, and I hope they may not be demolished by such dismal violence as happened to their predecessors.'

This 'dismal violence' is a reference to the Great Fire, by which the Guildhall was gutted, but not destroyed.

The present figures, which stand to-day on each side of the west end of the Guildhall, are not the ones just described, which were indeed somewhat fragile (as giants in shows are very apt to be), 'and made only out of wickerwork and pasteboard, put together with great art and ingenuity.' It was necessary that these giants should not be made too solidly, as in the Tudor days they were continually being carried about, and since they were made so slightly, 'old Time, with the help of a number of City rats and mice, at last ate them up. The dissolution of the two old, weak, feeble giants, gave birth to the two present substantial and majestic giants, who, by order, and at the City charge, were formed and fashioned. Captain Richard Saunders, an eminent carver in King Street, Cheapside, was their father, and after he had completely finished, clothed, and armed his two sons, they were immediately advanced to their lofty stations in Guildhall, which they have peacefully enjoyed since the year 1708.'

So says a quaint old writer. Captain Saunders, it should be explained, derived his title from his position in that valuable, but much ridiculed force, the City Train-band, and we read in the City accounts that he was paid the sum of 'seventy pounds' for his work on the two giants.

Captain Saunders must have been a good workman in addition to being a good soldier, and was certainly not over-paid, for, after two hundred years of 'watch and ward,' the gigantic figures show no signs of decay, and may, it is hoped, last for as long again.

The 'lofty stations' were not, however, the stations where Gog and Magog now stand. They were originally placed on each side of the entrance to the Council Chamber, and were removed to their present place on each side of the window in the great hall in the year 1815. In the same year the figures were examined and found to be ponderously constructed of wood, but hollow within; they are upwards of fourteen feet in height, and were evidently made for the permanent decoration of the building, and not for carrying through the City on festive days, as were their predecessors.

E. A. B.

THE FORCE OF CONSCIENCE.

AN Arab who had a great reputation for wisdom was consulted one day by a man from a neighbouring town, who had lost a bag containing a hundred Spanish dollars, and suspected that it had been stolen from him. The Arab, who also pretended to be a wizard or magician, returned with the man to his house, in order to make inquiries. He found that the man who had lost the money, and three of his brothers, lived together in one house. They were all married, and when the wizard had made a few investigations, he came to the conclusion that the bag had been stolen by one of the wives, though he could not tell which.

In the evening he commanded the women to be brought before him one by one, and he ordered each one to turn first to the right and then to the left, now to sit down, and now to stand up, and, in fact, to do any simple, meaningless thing that he could think of. All the time he looked at them in a terrifying way, and muttered a string of meaningless words in a hollow, mumbling voice. At last, he thought he saw one of the wives turn pale and tremble a little, and these signs were sufficient to convince him that she was the thief.

His object now was to get her to confess the theft, and restore the stolen money. He decided to rely upon the fear which he had clearly aroused in her. When the moment for retiring drew near, he contrived to give her a significant look, as he said, 'The house is very hot; I will repose on the terrace under the shelter of the vine.' He did so; and, as he had expected, the woman came to him secretly in the middle of the night, bringing the bag with her. She displayed great sorrow for what she had done, and begged him not to tell any one that she was the thief. On the following morning the Arab returned the money to its owner; but, pitying the thief, and thinking how hard her lot would be if he made it known that she had stolen the money, he refused to tell how he had obtained it.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 299.)

CHAPTER XXVI.—A PLAN OF CAMPAIGN.

TEDDY'S story took a long time to tell. 'Well, upon my word,' said Lieutenant Graham, when it was finished, 'I must compliment you on your pulling through the way you have, and if I'm not very much mistaken, you have pulled a small fortune out of the

fire—I mean out of the sea. I don't think you will find any difficulty about the salvage money: first of all, it's very evident from your statements, and the corroborative evidence, that the ship would have been wrecked on the Hamar only for the measures you took; secondly, your signal detached me from the fleet to help you. Oh, you are safe enough for salvage.'

'I am glad you think so, sir, because of my father,' replied O'Brien.

Teddy 'sirred' Lieutenant Graham, for he was clearly a person to be treated with respect.

'When these repairs are finished,' said the lieutenant, 'I shall get up steam in the main boilers; it's about sixty miles to Santa Cruz, Teneriffe, from here. I dare say I can manage stokers enough for the two ships. What's your speed?'

'Ten knots,' replied Teddy; 'it used to be twelve knots, but they put rolling-plates on her, she was such a beggar to roll, and that has taken a couple of knots off her.'

'I was thinking,' said Marley, 'about those fellows on the island; couldn't we manage to collar them, sir?'

'How could we?' replied the lieutenant. 'I should be only too joyful and willing to land with a party and hunt them down, but it's Spanish territory, and we are not at war with Spain.'

'All the time I was telling you our story,' said Teddy, 'the thought was in my head of asking you to try and catch those chaps, and if you'd let me suggest a plan that has occurred to me, I think you could do the business without landing.'

'Fire away!' said Lieutenant Graham.

'If you could bring the old *Kingfisher* to-night up close to Gommera, get a lot of your men armed on board her, and early to-morrow morning let her float past that little town with me and Dick Marley standing on the bridge, I think the whole hive would come off in boats to collar us.'

'It's not a bad idea,' said the lieutenant. 'Where do you get your ideas from, youngster? Fetch out your charts—yes, that's the one I want.'

He pored over a chart of the Canary Islands.

'Here's the Hamar, the Dacia bank is here, Gommera there.' He whistled to himself as he measured the distances with a compass.

'The only bother is, how to get her up there without steam on. We might, of course, steam her up to-night to the east coast of Gommera, and then rake the fires out, for if they saw smoke from the funnel they'd twig mischief. I could, of course, tow you, but I'm not going to strain my ship towing this old waggon all that way. Yes, I think that would be the best plan of campaign. Get her in position at dawn about five miles east of the place you speak of, and then let her loose, the destroyer remaining on the east coast. How many knots is the drift of this current, do you think?'

'I fancy about two,' replied Teddy, his heart jumping with delight at the idea that the officer was going to take the matter in hand, and at the thought of the scrimmage there was going to be.

'Well,' said the lieutenant, 'we could bring her five miles east. The set of the current is dead past Gommera according to this chart, so if we give her a

mile offing, or say a mile and a quarter, there is no fear of her going ashore.'

'The water is deep off all the Gommera coast,' said Teddy. 'I have seen soundings taken right in, a few hundred yards from shore, of half a mile.'

Lieutenant Graham remained for a moment plunged in thought; then he said, 'Of course, all this means delay. The Admiral signalled me to give you help, and, if detained, to rejoin the fleet at a given point in three days' time. I am not at liberty to tell you where that is, but I can do the business, I believe; put you and the prisoners into Teneriffe harbour, and be there in time. So you may take it as settled. Now, you boys, what provisions have you aboard? I want some food, and so do my men.'

'Tons!' said O'Brien. 'There's a whole store-room packed with tinned things, and grub of every description.'

'Well, I'll tell you what,' said the naval officer, unstripping his sword-belt, and placing his sword in a corner. 'You two go down to my coxswain, Sawyer, and show him the grub, and tell him to light the galley fire and get a meal ready. I'm going to lie down on the couch here and have two hours' snooze, for I've been at it since dawn. Don't wake me for two hours, unless you see an earthquake coming.'

'Right,' said Teddy, and they departed, shutting the chart-house door and leaving its occupant to his slumbers.

'That's the sort of fellow I like,' said Marley, 'a gentleman every inch of him, and no humbug about him.'

'And isn't he game for a fight?' said O'Brien. 'He caught on to the idea of catching that crowd like one o'clock.'

Sawyer, the coxswain, was standing near the saloon skylight on which Sloper was seated. Sawyer was contemplating Sloper, and the monkey was contemplating Sawyer.

'Are you the coxswain?' asked O'Brien.

'I am, sir,' replied Sawyer. 'Might I ask who toggled the monkey up in that there rig?'

'The cable-hands.'

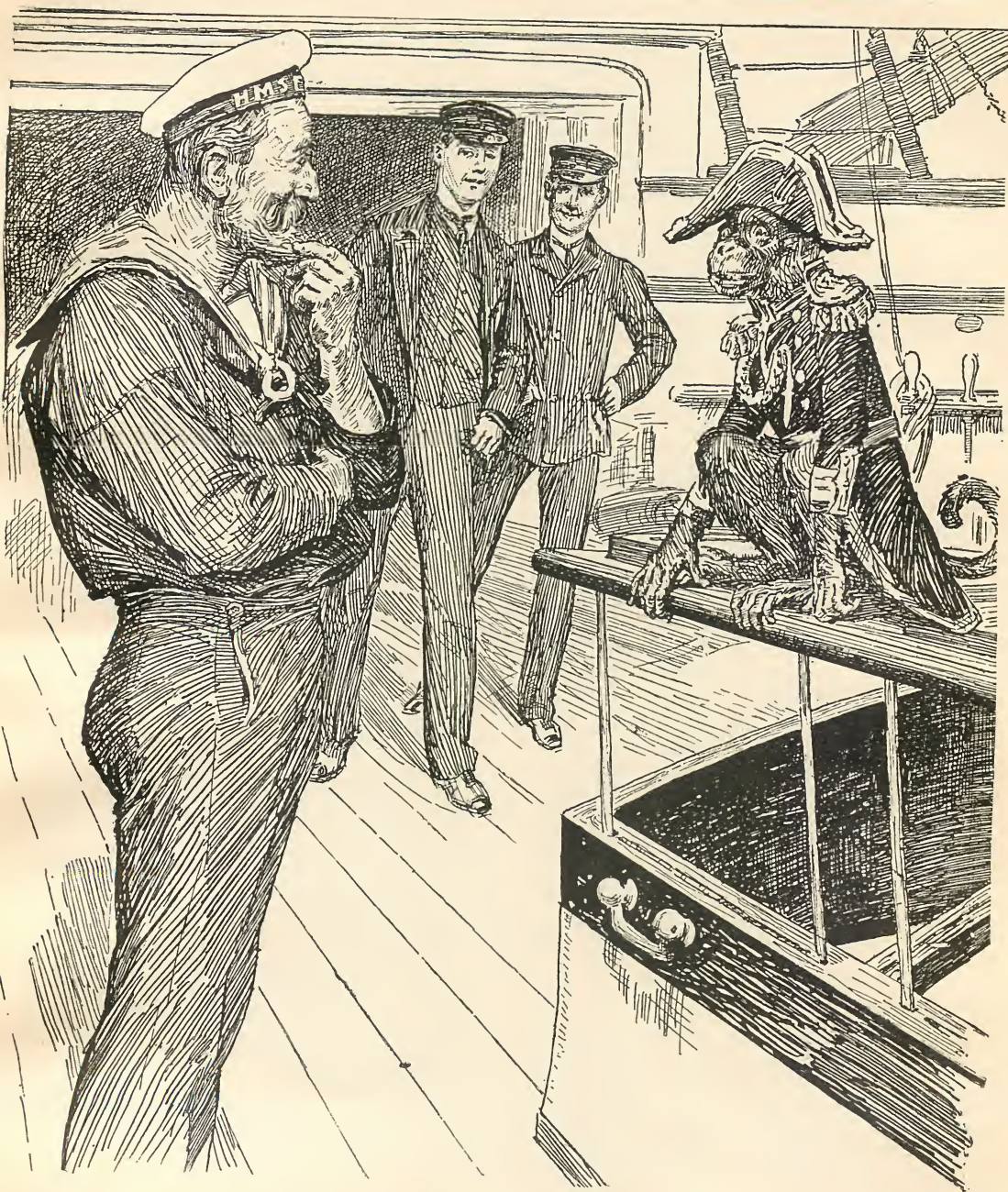
'Well, they've made a natural living portrait of old Catch-'em-alive-O,' said Sawyer, giving a certain admiral his nick-name. 'Not a penny photographer on Portsmouth Hard could have done the business better.'

O'Brien gave the lieutenant's order, and they all went down to the store-room.

Sawyer contemplated the display of provisions with a chuckle. Then he went to the saloon staircase and bawled up orders to one of the men to light the galley fire.

Then he came back and reviewed the provisions as a general reviews his troops.

'Here's two tins of lobster,' said he; 'that and some butter and some lemons, and I'll make you a stew fit to raise the hair on a bald man's head. A tin of mock-turtle soup, and the lobster to follow, and that big tin of turkey to follow that—what's this, a plum-pudding in a cloth?—that's to follow the turkey. We will put the things in that there big basket, sir, and one of the men will bring them



"Sawyer was contemplating Sloper, and the monkey was contemplating Sawyer."

to the galley. Well, I have often heard that the grub on the cable-ships was good, but seeing is believing."

They came on deck, and at Sawyer's direction a man went down for the provisions, and two more to get the saloon in order and lay the table, and hunt

about for crockery and glass and silver, and everything else that might be requisite.

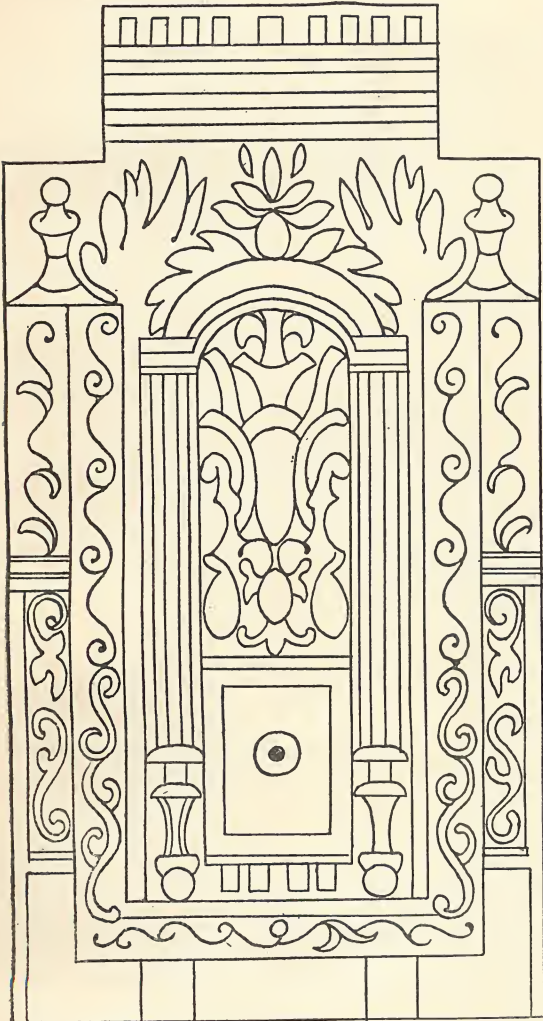
Sawyer was one of those Royal Navy men who can do anything, practically speaking, from underpinning a rickety engine to cooking a dinner.

(Continued on page 318.)

DOORS, LOCKS, AND KEYS.

III.—AN ANCIENT LOCK: CAGOT DOORS.

SOME of the ancient locks which have been preserved are of great beauty, and an immense amount of labour must have been expended on their ornamentation. The one given in the illustration is from an ancient chest which belonged to the former Manor House of Claverton, near Bath.



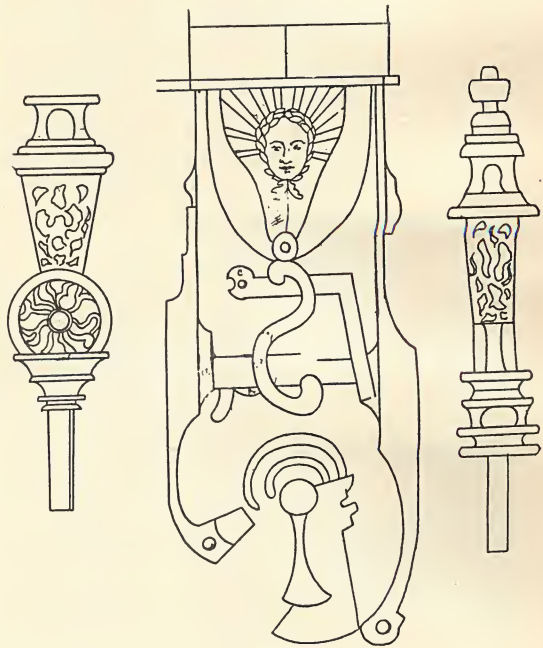
Outside of Ancient Lock at Claverton Manor.

The house itself was of great age, and stood in the village of the same name until the year 1820, when, being accounted unsafe, it was taken down. Tradition had declared that, during the Parliamentary Wars, the then owner, Sir W. Bassett, was one night entertaining friends at dinner when a cannon-

ball was fired into the dining-room by a passing party of Cromwell's soldiers; and the truth of the tale was established when, on pulling down the walls, a ball was found embedded in the masonry above the dining-room mantelshef.

The chest-lock is rich in design, *although, for its real purpose of defending property, it was a very poor thing.* It is made on the 'latch lock' principle, which was in great favour during the sixteenth and seventeenth centuries, and the intricacy of the construction may be inferred from the fact that one of the greatest locksmiths of later times declared 'that, with all his vastly-improved tools, he could not undertake to make one like it under twenty pounds.'

The design on the exterior plate or escutcheon falling over the lock is elegant and uncommon, and the quaint head presiding over the works in the interior has a quiet humour of its own. Probably the creature realises how easily its defences might be broken down, and smiles to itself over the folly



Interior of Claverton Lock, with Keys.

of humanity, inspection showing that a very slight displacement of the arm of the lock would render it utterly worthless.

The drawing of the interior represents it when locked, and in unlocking the key presses the spring upwards. This has the effect of raising a small tumbler concealed in the bolt, which then flies back. A fixed pin by its leverage draws back the other bolt, when the spring performs its duty. The action of the key also presses the S-shaped piece, which, by opening the clasp, releases the hook, which is joined to the top of the hasp.

The lock keys, which are also given, are of beautiful design and workmanship.

At the Roman villa of Chedworth, in the Cotswolds (where many relics of Roman work have been collected from the ruins), a very curious old iron lock and some keys are shown in the museum.

Turning from locks back to the doors which carried them, there are in parts of eastern France certain doors which surprise the travellers, the lintels being placed so low that it is impossible for even short persons to enter without stooping. These are known as 'Cagot' doors, and were a device whereby the unfortunate race called 'Cagots' were perforce made to bow on entering the church.

The Cagots are found in Béarn, Gascony, and parts of the Pyrenees, and are supposed to be descendants of the old Visigoths, defeated by Clovis in the fifth century, and their name to be corrupted from 'Canis Gothus,' or 'Gothic dog.' Their blue eyes and fair complexion certainly suggest a northern origin, though other descents have been claimed for them. They were treated with great cruelty in former days, and until the time of the French Revolution were denied the commonest social rights, being permitted only to be butchers, rope-makers, and carpenters. Though forced to go to church, they were only allowed to enter by their own low doors, and made to stand in a part of the building roped off from the congregation.

HELENA HEATH.

THE NEW BICYCLE.



WHEN I have got a stubborn
sun

And seven won't subtract,
When the wrong answers
always come

Although my brain I've
racked:

When everything seems hor-
rible

And all is in a clatter,
I think about my bicycle,
And then it doesn't matter.

When I have met an enemy
And had a good old fight,
And come out much the
worse for wear

And looking like a fright:
When Parkins chaffs me at the gym.
For growing slightly fatter,
I think about the bicycle,
And then it doesn't matter.

When I have been extremely rude
And must be sent to bed,
Or, having eaten rather much,
Have got an aching head:
When Aunt Matilda 'shuts me up,'
And tells me not to chatter,
I think about my bicycle,
And then it doesn't matter.

And how it works I cannot tell,

But things aren't half so bad

Since I have hit upon this spell

Which always makes me glad.

Bad things are good, and hard things nice,

And scoldings almost flatter,

For when I think about my 'bike,'

Then *nothing* seems to matter!

IN SCHOOL AND OUT.

V—MEREDITH'S PET COCK.

MEREDITH was for some reasons rather sorry when, the repairs to his father's house being finished, he ceased to be a boarder; but for one reason he was extremely glad. Pets were forbidden at the Grammar School, and he had sorely missed his beloved 'Teddy,' an enormous cock, whose proper name was 'King Edward.' Meredith had reared him by hand ever since he was a tiny chick a day old, and he was as tame and nearly as intelligent as a dog. He had come from a prize poultry-farm, and had broken his leg while he was being packed in a box, with eleven other day-old chicks; and Meredith, who was at the farm with his father at the time, had been so distressed at the idea of his having to be destroyed that the Doctor took him home in his pocket, set his leg most successfully, and by the time he was old enough to leave his cotton-wool-lined box and dispense with a hot-water bottle, he walked as well as any other chick.

Teddy was now full-grown, and as soon as Meredith returned from school, in the afternoon, he followed him everywhere like a dog. He even sat beside his master in the study, while he did his 'prep,' on a large perch something like a parrot's, which had been specially made for him, and kept the boy company on the many occasions when the Doctor was called out in the evening. Teddy could do nearly as many tricks as a circus-dog, and the Grammar-school boys considered it a great privilege when Meredith took them home and introduced them to his pet.

During the hours that his master was at school, Teddy strolled about in a little yard by the kitchen door, and transferred his allegiance for the time being to the cook, who was one of his many admirers. In fact, when he was ten months old he was such a handsome bird that Meredith was advised to put him into the Christmas show. But, while the boy was wondering whether he could possibly allow Teddy to be shut up in a show-pen for two days, the bird suddenly and mysteriously disappeared. The cook had picked him up and put him outside the kitchen door at twelve o'clock—no one ever thought of chasing him like an ordinary fowl—and ten minutes later, when she went to the pump for some water, he was nowhere to be seen. She called him twenty times, whereas one call usually brought him scuttling along; then she fled into the surgery with the awful news that Teddy was lost.

Luckily, there were no patients there, and the Doctor came out at once to help in the search; but though every nook and cranny in the whole place was examined, the cock had completely vanished,

and Meredith was in a state of despair when he returned from school. He inquired at every house in the neighbourhood; he went to the police-station, where they suggested gipsies; he searched everywhere till bedtime, but found no trace of his pet, either alive or dead.

Long before breakfast-time he was up again, continuing the hunt, and it was a tired and depressed-looking boy who took his place in class at nine o'clock. His father had sent a note privately to Mr. Williams, the master of the new form into which he had lately been moved, telling him what had happened, so he ignored the fact that, for once, Meredith was paying no attention to his work.

The last lesson that morning was geography, and, as it was Mr. Williams' particular hobby, he always made it very interesting. The week before he had been explaining to his class how maps and surveys were made, and had promised that this week they should learn the practical side of the work by making a map of the Lower School playground, which was immediately under their class-room windows.

'Now, boys,' began Mr. Williams, 'the playground is exactly sixty yards by forty, and I want you to draw a plan of it on the scale of one-tenth of an inch to the yard. After that every one, with the exception of Anderson and Meredith, is to put in on the plan the carpenter's shop, the bicycle-shed, and the wood-shed. While you are drawing them, as you think they ought to be, Anderson and Meredith will go out and measure them, and I think the results, compared with your own drawings, will show you how impossible it is to draw a map correctly by eye alone.'

The two boys departed, armed with a measuring-tape, and nothing was heard in the schoolroom but the noise of pencils and india-rubbers. Then suddenly Anderson burst into the room breathlessly and exclaimed, 'Oh, sir!—please, sir!—will you come at once? King Edward is in the wood-shed!'

'What *do* you mean?' asked Mr. Williams, in astonishment.

'It's Meredith's cock, sir!' said half the class, with one accord; for they had all heard of its disappearance.

'Meredith's cock! Nonsense!' said the master. 'How can Meredith's cock be in the school wood-shed?'

'But he *is*, sir!' repeated Anderson. 'As soon as Meredith began to talk about the measurements, the cock began to make queer noises, and Meredith says he would know his voice anywhere. And it sounds as if he were being choked; and Meredith says, *please* will you get the keys from the porter and come as quickly as you can.'

Mr. Williams looked round the class. It was hopeless to expect any more work from the boys at present. 'Can I trust you to make the plan this evening?' he asked, and, when the boys assured him that he could, he sent one of them to fetch the porter with the key.

They found Meredith kneeling on the ground, calling out words of encouragement through the key-hole of the wood-shed. From inside proceeded strange half-stifled sounds, which he declared to be the voice of his missing pet. He was right, for, when the

porter opened the door, King Edward was discovered in a large hamper, with his head tied up in a piece of sacking.

'It was lucky the poor bird was not killed outright,' said Mr. Williams.

'It's that rascal, Bertie Jones,' said the porter, angrily. 'He has always had a spite against Master Meredith since he got him that caning from Mr. Anderson. If I had guessed what he wanted the hamper for in the morning, and why he borrowed my key in the evening, so artful-like, saying he wanted to chop wood for the cook, I'd have hampered him, I would. A week in prison, that's what would do him good.'

But the matter was not taken up by the police. It was thoroughly sifted by Mr. Davidson instead, and he received unexpected assistance that same evening from Mr. Carter, the father of the redoubtable Bill.

'I didn't hear about Master Meredith's cock till this afternoon, sir,' he began, 'and I thought I had better come and see you at once, for fear you should think my boy had anything to do with it. Bill has told me the whole story, but I don't know what lies that young Jones may have been telling about him.'

'So far,' said Mr. Davidson, with a smile, 'Bertie Jones has said nothing; though I hear the porter has broken two canes in the endeavour to make him own up.'

The man looked relieved, and went on: 'Well, of course you know, sir, there's always been a rivalry between the town and Grammar-school boys—it was the same in my own day—and Bill has been leading the town. But it has all been honest fun, and even that dynamite business, though it was an impertinent trick—and I gave him a good hiding for it—was nothing worse than a foolish joke.'

'Of course it wasn't,' assented the head master, with a smile at the recollection.

'And this chasing the cadets—why, I'm afraid I should have done it myself in my time; but when that young Jones came to Bill a fortnight ago, and said that he was planning to pay Master Meredith out by stealing his cock, why, that was quite a different matter, and my Bill wouldn't have anything to do with it. I fancy he told Master Bertie pretty plainly that larks are larks, and stealing is stealing; for they haven't been on speaking terms since. Then yesterday, to Bill's surprise, when he got home from school, he found Jones hiding in the tool-shed at the end of the garden, cock and all. And he had the cheek to ask my boy to help him kill and pluck the fowl, and they'd go shares in the price of it. Of course Bill wouldn't, and he told the other straight out that he was on the high road to prison. That seems to have scared my gentleman, and instead of killing the bird he hid him in the only place he could think of at the moment.'

Mr. Davidson was inclined to agree with Mr. Carter in his opinion of the boy, and before long a fresh home was found for Bertie Jones, with a man who had more time to give to his reformation than had the busy school-porter.

Three weeks later, at the Canbury Poultry Show, the silver cup was handed to the proud and jubilant owner of King Edward.



“‘King Edward’ even sat beside his master in the study.”



"The snake had not been killed by the passing train."

THE ARGENTINE POSTBOY.

Founded on Fact.

THE road along which the boy was travelling was worn chiefly by the hoofs of the pony he rode. It was not the high-road—that lay fully five miles to the right; it was a track he had made for himself, and ran, straight as an arrow, across the Argentine plain. Week in and week out, every day in the year, he carried the daily post to Salvacrux along this track, and, since none used the route save himself, his daily ride across the sands was a solitary errand.

There was a point in the track where it crossed the railway at right angles, and the lad had come to regard this junction of road and rail as a spot where he might alight for a few minutes' rest by the way. The long stretch of line on either hand had a fascination for him; moreover, the 'Argentine Flier' passed the spot every day at the same hour, and the postboy was wont to sit by the permanent way till it had gone roaring by.

To-day he halted at the spot at the usual hour, and flung the reins across the pony's neck. From his perch he surveyed the long stretch of rails, his eye travelling ahead to a point where the iron road narrowed down to meet the horizon. Dreamily, and with eyes half closed in the sunlight, he regarded the track, while his pony stretched its neck for a succession of long breaths, and tossed its head in appreciation of the rest from ploughing across the sand.

Presently the boy's eyes widened; he sat upright suddenly, alert and interested.

'There's something on the line, Jerry,' he said aloud, catching up the reins quickly. 'Not anything serious enough to upset the express, but—let's go down and look, old chap.'

He wheeled his mount round and cantered him down the line. A hundred yards or more he proceeded, when suddenly the pony halted, abruptly and without the word of command, and stood stock still. The boy felt the animal quaking beneath him as if in fear; the pony flung back his head and gave a snort of alarm.

'What is it?' cried the boy, soothingly; but, as he reached forward to caress his pony's neck, his eyes were on the obstacle that lay between the metals. 'Whew!' he said; 'it's a snake, and a pretty big one, too. Never mind it, however, Jerry: it's asleep. But shouldn't I love to see what happens when the "Flier" comes along! And—it's coming, coming this very minute! Hear the roar, Jerry? And, see the smoke? It will be here in two minutes. Stand back a bit!'

The train grew in bulk as it approached; its roar increased till, with a mighty rush, it reached and passed the spot, leaving the boy enveloped in a cloud of dust and sand. He drew back his pony a pace or two; then, as the sand settled, he looked eagerly for the snake.

There was no need for him to look long or very keenly. There it was, a very much disturbed reptile, writhing in contortions on the metals. It had not been killed, though evidently it had been either

hurt or severely frightened by the passing train. The 'Flier' had disappeared, the air was clearer again, and the boy watched keenly.

But as he watched he grew alarmed. Presently he gave a violent jerk at the reins; a moment later he cried aloud. The snake was travelling in his direction, at a pace that would bring it upon him in a few seconds.

The pony, startled by the boy's cry and alarmed by the oncoming reptile, gave a sudden bound, the prelude to a dash for safety. But the unexpected movement proved disastrous to his rider. The lad lost his balance and fell. He felt the reins snatched as by a giant's fingers from his grasp, his eyes were suddenly blinded by the sand kicked up by a disappearing pair of heels, and he rolled back on the sand at the mercy of the snake.

It was close upon him, but perhaps the glare in his eyes as he faced it had some influence in restraining the creature, for it did not at once attack. It halted, almost at his very feet, and assumed the terrible attitude which precedes a snake's spring—its body rigid, but its tail whipping the dust. As it crouched, the boy recognised its species, and fell to wondering as in a nightmare where it would strike him, and what and how long would be the pain, and breathed a prayer silently. There seemed no hope; yet he kept his eyes fixed in a wild glare full on the snake's head, and thus for a time delayed its fearful stroke.

Up in the blue overhead were a pair of eagles; these, attracted by the sight of prostrate forms on the sand, made a sudden downward swoop in the hope of prey. The boy's eyes, still fixed in a vacant, hopeless stare on the reptile's head, lifted for an instant at the sound of wings immediately above, and the snake at the same instant shot back its head. Round and round the spot the eagles were flying, as if uncertain of attacking either boy or beast. Soon, the boy thought, they would fly off, and the snake would then strike him. But—the snake's attention was diverted! Why not take advantage of it, and make a dash for freedom?

He looked round hastily. His pony was in sight, returning, but hesitating to come near. He was on the point of a wild scramble to his feet when—swoop!—a swift pair of wings descended, great talons were stretched out with a long, lithe neck behind them; they fell, straight as a bolt from the blue, full on to the snake's head, inflicting a severe wound. The boy was on his feet now, no longer dazed and terror-stricken. His senses had returned, and, in his excitement, he shouted wildly to the pony as he pelted away across the sand.

His pony pranced forward to meet him. Frantically he clambered into the saddle and urged him to a gallop. But ere he had gone sixty paces he suddenly pulled him up and swung him round.

'Not so fast, Jerry!' he cried. 'We are at a safe distance, and in no great hurry. I want to see what happens.'

He saw the eagles busy now. The pair of them had seized the reptile by the tail, and were dragging it backward along the ground, and whenever the snake recoiled on them they darted aside and flew aloft again. For a time they circled overhead; then

they divided forces, the one making a feint at the head while the other pounced down on the brute's tail. The snake's mad hissing came over the sand like the sound of escaping steam as it vainly attempted to face both its tormentors.

'Steady, Jerry!' the boy cried as the pony showed signs of fright again. 'There!' he cried a moment later, 'that got him—that was a good stroke.'

One of the birds had struck the reptile's head again, this time with fearful effect. The snake fell forward in a confused, wriggling mass, and the instant its head was down on the sand the birds had seized its tail. They dragged the brute round in a wide circle, trailing its body in the sand till at length it grew limp and helpless.

'They have it now,' the boy murmured as he turned away from the sight of the feast that was just beginning.

Half an hour later he arrived at the post-office at Salvacrux.

'You're late, boy, to-day,' the postmaster said. Startled by the boy's jaded appearance, he added, 'What's amiss?'

'I have been watching eagles killing a snake,' answered the boy.

'Ah!' said the postmaster, 'I saw a similar occurrence a few weeks ago—an eagle killing a snake by lifting it up into the air by its tail—a hundred feet at least—then dropping it on to the stones. But,' he added, 'you only see such a sight once or twice in a lifetime, boy!'

A STORY OF A PIGEON.

A PRETTY story of a pigeon was told in the *Times* not long ago. A pigeon-owner had missed one of his birds for two or three days, and had almost given up hope of its return, when he was struck by the behaviour of another inhabitant of his pigeon-loft. This bird, as soon as he had hurriedly filled his crop with corn at feeding-time, would fly away with great speed, and repeated the action so often that the gentleman decided to have the bird watched. It was at last discovered that the pigeon settled on a certain chimney, and proceeded to drop down it the corn he had brought with so much eagerness. An examination of the chimney followed, and on a ledge some distance from the top the missing bird was found alive—saved by the care of its mate!

INSTEAD OF THE SUN.

IX.—ELECTRIC LIGHT.

EVERY boy has played with magnets, and watched with delight how they picked up needles, pens, keys, and other objects of steel and iron. Scientists, too, have played with magnets, but they have given much study to their play, and the result has been many wonderful and useful inventions.

It is now nearly eighty years since Professor Faraday, a distinguished chemist, showed that there was much similarity between magnetism and electricity, and that the one could be made to produce the other. Among many other discoveries, he found

that when a piece of iron is brought near to the ends or poles of a magnet, there is a little wave, as it were, of electricity passing through the iron for a moment just as it touches the magnet. In the same way there is another momentary wave of electricity in the iron when it is pulled away from the poles of the magnet.

Other experimenters soon saw that if they could only make the iron move very quickly to and from the magnet, they might make the waves of electricity follow each other so rapidly as to create an electric current. They tried various ways of doing this, and by-and-by success rewarded their efforts. The simplest means of creating the current was to fix two pieces of iron to a rod, one at each end, and make it spin round, like two spokes of a wheel, near the poles of the magnet. As each piece of iron whirled round in its circular path, it passed rapidly across the poles of the magnet, and every time it did so waves of electricity were sent through it. Each piece of iron had a long wire wrapped round it in many coils, which gathered up the waves of electricity, and delivered them as a current at a suitable part of the machine.

Nearly every one has held the handles of a magneto-electric machine at some time or other, and received an electric shock or current. The machine which produces it is usually such a one as I have described. Electric currents are sometimes beneficial to persons who are suffering from certain diseases, and chemists sell little machines for producing the currents. These machines are packed in small, narrow boxes, and on opening the lid we have no difficulty in discovering the horse-shoe magnet, and the little irons wrapped with silk-covered wires, which look like bobbins. The latter are turned by means of a wheel and handles, and there are smooth metal handles for the patient to grasp when he wishes to receive a shock.

These are among the smallest magneto-electric machines which are made. Large machines of a very similar kind are used for generating the electricity for electric lights, electric trams, and many other purposes. These are usually known as dynamos, and a steam-engine is, as a rule, *required* to put them in motion. They vary a great deal in shape, but the chief fact to be remembered is the simple one that the electricity which they produce is obtained by whirling iron wire-covered bobbins close to the poles of one or more large magnets.

When we take hold of the handles of an electric machine, we feel a peculiar throb and shaking, which is caused by the passing of a current, as we call it, from one handle to the other. We feel *nothing* so long as we only touch one handle, but the moment we take hold of both, and make our body a sort of bridge between them, we feel the effects of the current.

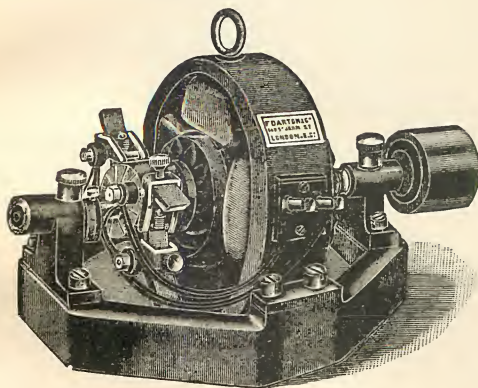
We might make a bridge of various materials for the current, and we should sometimes obtain some curious results. If we used a thin platinum wire, we should find that the current made it warm, because of its resistance to the amount of current going through. Indeed, if the wire were very thin, it would become red-hot or incandescent, and we should have a glowing light produced by electricity; loops of fine platinum wire are largely used by



The Discoverer of the Principle
of Electricity.

An Electric Shock.

doctors. The great chemist, Sir Humphrey Davy, tried a bridge made of sticks of charcoal, and he found that they burned with an exceedingly brilliant light, more dazzling than any other artificial light which he had seen. This experiment was made long before Faraday made his experiments with magnets, and Sir Humphrey Davy obtained his electricity from an electric battery made up of about two hundred vessels containing chemicals and metal plates joined to each other by wires. He attached a stick of charcoal to each of the end wires of his battery, and when he brought the sticks together he obtained the brilliant light.



A Typical Electric Dynamo.

The large electric lights, enclosed in great globes, which we now employ in our streets and stations—the arc lamps as they are called—are only an improved form of Sir Humphrey Davy's electric light. It was found that the sticks of charcoal burned away very quickly, and rods of hard and specially prepared coke or carbon are now used in place of them. They wear away a little when the current is passing through them, and the lamps are provided with clockwork or electrical mechanism, which moves the carbons towards each other as they are consumed.

The small pear-shaped electric lights—the incandescent lamps which are used in houses and shops—are somewhat different from the arc lamps. The tiny globes enclose a slender thread which has been half burnt or charred by a special process. The current of electricity passes through this thread in its course from one wire to the other, and it makes the thread incandescent, so that it gives off a glowing light. In order to prevent the charred thread burning away, the air is taken out of the globe when the thread is inserted. As this kind of lamp requires no air and gives out little or no heat, it may be used in places where it would be impossible to light an ordinary lamp. The diver, for instance, is able to take an electric lamp with him to the bottom of the sea.

The dynamo in the illustration is of a common type. It can be made to generate electricity by being driven by a leather belt attached to some motive power, such as a gas engine. The belt is attached to the driving-wheel at the right end.



The Stocks in Shoreditch Churchyard, London.

STOCKS.

IN all London there is perhaps no busier thoroughfare than that in which stands the old parish church of St. Leonard, Shoreditch. Trams, cabs, vans, omnibuses, motor-cars, carts and carriages of all sorts and kinds are passing here in an unceasing stream at all hours of the day, and indeed for the greater part of the night. It is not a pleasure resort; all here speaks of hurry and relentless toil, with the one exception of the grey old church, which has looked out on so many changes; and in the churchyard there stands a survival of a law made as long ago as the reign of Edward III.—the Parish Stocks and Whipping Post.

At one time stocks were ordered by law to be set up in every parish in the kingdom, for the punishment of 'sturdy vagrants,' and other people convicted of minor offences; but they have gone out of fashion

with modern ideas, and time has swept most of them away.

'The stocks was a simple plan for exposing a culprit on a bench,' and having his ankles made fast through holes in a board, which could be locked and unlocked as ordered.

The usual custom was for a man (or sometimes a woman) to be put in the stocks for half a day, and though it may seem a light punishment merely to sit on a bench with your feet through two round holes, yet the punishment was keenly felt by those who had to endure it, and after a time became very painful.

There is an amusing story told of Lord Camden, who in 1790 was Chief Justice of the Common Pleas, and a very wise and humane man.

One day when walking with a friend at Alveley, in Essex, he came upon the parish stocks.

The Chief Justice looked curiously at them, and at last sat down on the bench and asked his friend

to lock his feet in the stocks, that he might know what it felt like to be there. This the friend did, and then took a book from his pocket, and sauntered away, meaning to return in a few minutes and to release the Judge.

But the friend was an absent-minded man, and very soon had forgotten all about the poor man he had imprisoned in the stocks.

The Chief Justice, finding himself forgotten, tried his very best to get out, but all in vain. He called for help, but no one heard, till at last a man came along leading a horse.

'Will you be good enough to unlock these stocks,' said the Chief Justice politely. 'I am only here by mistake.'

'No, no, old man!' said the country fellow. 'You were not set there for nothing!' and he passed on and left him.

It was some hours before the Chief Justice was missed, and was at last released by a servant sent out to look for him. Good often results from evil, and good was to come of this imprisonment.

Some time afterwards the Chief Justice had to preside at the trial of a magistrate for false imprisonment, and for putting a prisoner in the stocks without cause. The counsel who was defending the magistrate made light of the whole charge, and especially of the stocks, which, he said, 'everybody knew was no punishment at all!'

The Chief Justice rose, and, leaning over the bench, said, in a half-whisper, 'Brother, have you ever been in the stocks?'

'Really, my Lord,' said the counsel, in an offended tone, 'never!'

'Then I have,' said the Judge, 'and I assure you, brother, it is no such trifle as you represent.'

Stocks were often so constructed as to serve both for stocks and whipping-post, and this is the case with the Shoreditch stocks. If you notice the posts which support the stocks you will see, near the top, iron clasps, which were to fasten round the wrists of the offender, and to hold him securely whilst the punishment was being inflicted.

When the monasteries were broken up in the reign of Henry VIII. a number of homeless people were thrown upon the world, who wandered about from place to place, begging for alms and shelter. In time their numbers became so great that severe laws were passed to repress these 'sturdy vagrants,' and both men and women were publicly whipped, and whipping-posts were erected in every parish. A strict record was kept of these whippings, and in one Huntingdon parish eightpence was paid to 'Tho. Hawkins' for whipping two men, whose only crime was that they 'had the smallpox.'

A poet of that day writes:—

'In London, and within a mile I ween,
There are of jails and prisons full eighteen,
And *sixty* whipping-posts, and stocks, and cages.'

There was a poor chance of vagrants escaping a whipping with so many posts at hand!

The thatched roof of the Shoreditch stocks is specially noticeable, as for miles round there is probably no other thatched roof to be found. The thatch, however, is no longer of the golden colour

that we often see on country roofs. London soot and rain have left their mark on it, and it is now of the same dingy colour as most of the other roofs round it.

Still, dingy or not, the stocks are a quaint sight left there in the quiet churchyard, in the midst of the teeming London streets, and they bring pleasant thoughts, too—instrument of punishment though they be. We have many sins on our consciences in this twentieth century, but, at any rate, our laws are more humane, and we no longer provide for the public whipping of men and women, and even children, as was the case when first the stocks now in Shoreditch churchyard were erected.

CHATTERBOXES.

NOT only little boys and girls,
Whose tongues run on all day,
Are Chatterboxes, but the earth
Holds quite a large array.
When little streams bound for the sea
Go tumbling down the rocks,
Their voices busy as can be,
Each is a Chatterbox.

Throughout each pleasant summer day,
In meadow and on hill,
The birds are chattering all day long,
Their tongues are never still.
From little birdlings in the nest,
And grown, that soar in flocks,
Chirp, note, and song, come all day long—
Each is a Chatterbox.

I stood one day beside the sea
And watched the waves come in:
They broke upon the ocean strand,
And there was such a din!
But, oh, they didn't mind a bit
The buffeting, the shocks;
They laughed and played and made such noise—
Each wave a Chatterbox.

And if the tongues of boys and girls
Are harmless as the rills,
Or as the little warbling birds
That sing above the hills,
And if their converse is as sweet
As waves' among the rocks is,
Why, then the world will never mind
If they are Chatterboxes.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 308.)

AT six o'clock, when Lieutenant Graham awoke from his slumbers and came down to the saloon, he found a table spread with a snow-white cloth and glittering glass and silver, a pineapple in the centre, and a dinner fit for a king awaiting him.

Sawyer forgot nothing, even to the coffee which crowned the meal.

'Oh, Sawyer can do anything,' said the lieutenant, when O'Brien expressed his surprise. 'He's the most

ingenious chap I have ever sailed with. I remember once, when the beggar was doing two days' cells for outstopping his leave and kicking up a row, one of his mates smuggled him in a tin of sardines. He had nothing to open it with, but he found a tin-tack,* and he opened it with that. Now, a man who can open a box of sardines with a tin-tack can do most things in this world.'

Here Sawyer himself knocked at the door of the saloon.

'The artificers report the boiler's mended, sir, and fit for service.'

'Then get the stokers aboard and fire up at once. The coal-chutes are in working order and everything O.K. with the bunkers, I suppose?'

'Everything, sir.'

'Right! See here, Sawyer—I'm taking the ship to-night up east of the island of Gommera. I'm going to draw the furnaces and float her down the coast on the current, for the crew that mutinied and a lot of Spanish ruffians are on the island, and they want to catch Mr. O'Brien and his companion. Mr. O'Brien will show himself on the bridge, and they are pretty certain to come off, some of them, and try to take him. I want ten men on board with rifles and ammunition.'

CHAPTER XXVII.—THE TRAP.

WHEN they came on deck, the sun was setting.

'I shan't start till the moon is well up,' said the lieutenant. 'Lucky the moon is full, or we should have to go miles out of our way to avoid that Hamar rock. As it is we can steer as well as if it was day. Sawyer, take the boat and bring Mr. Greg aboard.'

When Greg arrived, Mr. Graham told him of the Spaniards and the plan of campaign against them, and the face of the pugnacious Greg lit up. But the light went out of it when he was told that he would have to stick to the destroyer, miles away from the scene of action.

'You and Ferguson must look after her, keep the engines ready, and get up full speed when you hear a gun. That reminds me, we want a gun for signalling. Have one of the quick-firers transhipped with half-a-dozen blank cartridges; bring her in the pinnace to the starboard quarter, and we will winch her on board, but not till I signal, for the steam is not on the main boilers yet. Now I want you and Mr. O'Brien here to shake hands. Mr. O'Brien has saved this ship, and I have a great respect for his abilities.'

The two lads shook hands in a friendly manner, and Greg departed.

The moon was well up in the sky when the rumbling of the boilers gave the welcome news that steam was up.

Then Lieutenant Graham gave the order, and the quick-firer was rowed to the side, a tackle was rigged, the winch set going, and the gun brought on board. When it had been fixed in the bow with a tarpaulin over it, the destroyer hove off half a mile with orders to follow at that distance; a steering-light was fixed to the after-railings, and at four bells (ten o'clock) Lieutenant Graham took his place on the bridge.

'I think we have made all the arrangements possible to be made for caging these birds,' he said to O'Brien, who stood beside him, 'and there's nothing to be done now but start.'

He turned the engine telegraph-handle to 'Half speed ahead,' and almost on the far-off tinkle-tinkle of the bell the ship began to move.

Sawyer was at the wheel, staring into the lamp-lit binnacle with an absorbed expression as he revolved the spokes.

'The steam steering-gear works all right,' said the lieutenant, following the movements of the needle on the compass card. 'A good thing for us. I wonder the beggars didn't sink the ship when they found she was useless.'

'I think, maybe,' answered Teddy 'that when they had landed the crew, they intended returning to take all the stores and valuables they could out of her, and they would have sunk her then; but they were so busy chasing us, they had no time to think of the ship.'

'Maybe,' replied the lieutenant.

At seven bells (half-past eleven) they passed the Hamar rock, standing like a ghost in the moonlight.

The ship was making eight knots according to the revolutions of the propeller, but as she was fighting a two-knot current, her real speed was proportionately less.

'Now,' said Lieutenant Graham when the Hamar was passed, 'you two boys trundle down and have some sleep: you will want it to-morrow, if I'm not mistaken.'

From the elevation of the chart-house, before they turned in, they could see the destroyer following the *Kingfisher* with the fidelity of a swimming dog.

Not a light was showing on either vessel with the exception of the steering-light fixed to the after-rails of the cable-ship.

The moon had sunk, but scarcely a star had paled when the stopping of the trampling sound of the engines woke the sleepers in the chart-house.

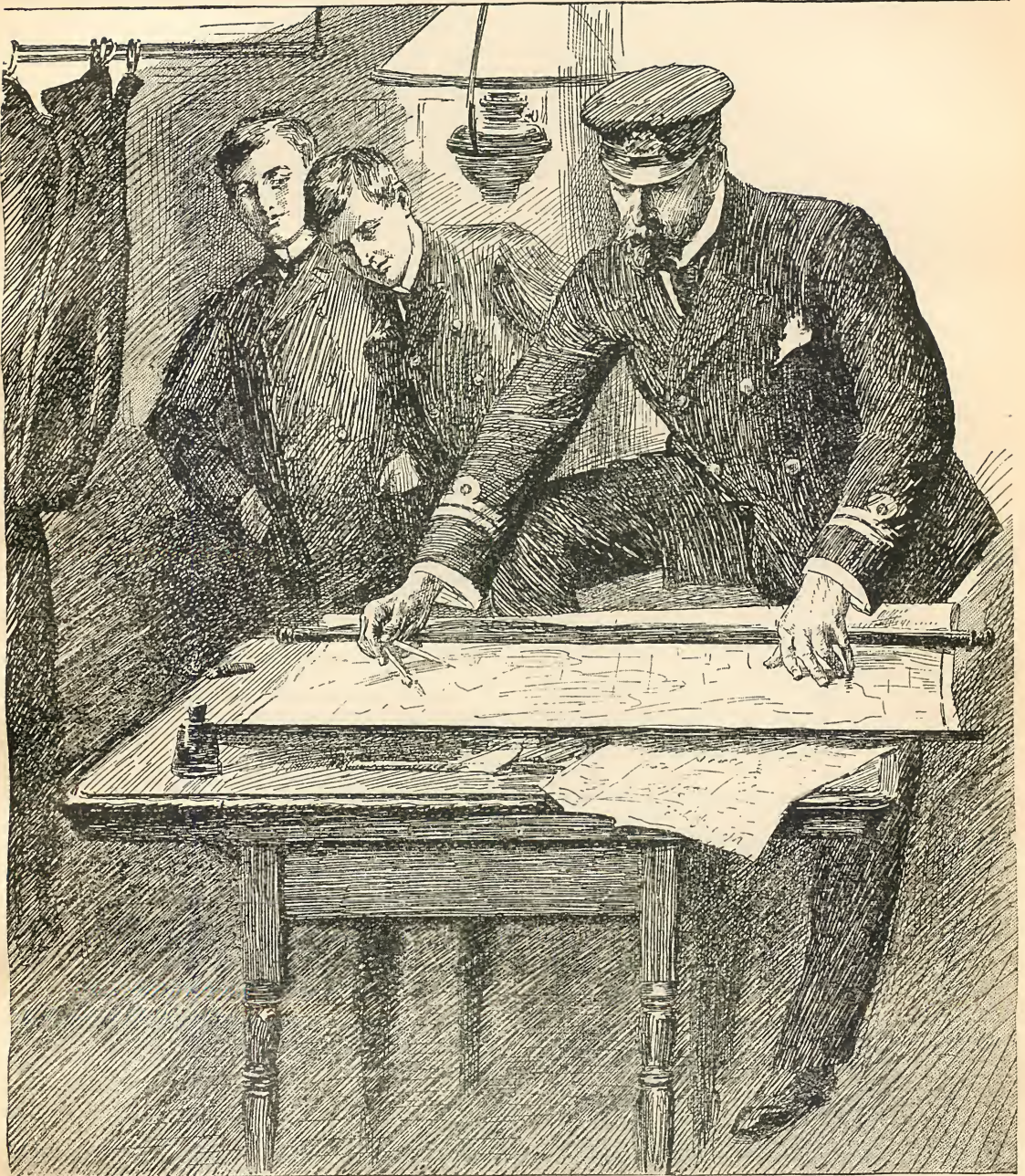
They were lying about five miles to the east of Gommera, and the destroyer was drawing up to them cautiously with not a spark of light showing.

'Now, youngsters,' said Lieutenant Graham, coming into the chart-house, 'show a leg, trundle up to the galley and get some hot coffee—Sawyer is serving it out—and see here, where's that chart locker? Oh, here it is! I want the chart of Gommera.'

The *Kingfisher* had on board a most complete collection of charts: the ordinary *Admiralty charts* and her own. The great Roberts Company had much to be proud of, but perhaps they prided themselves most on their magnificent series of charts made from the soundings taken by their own ships and their own officers.

The Gommera chart, which Lieutenant Graham was now studying, was no exception to the rest. It would have made a captain of the old time marvel to see the care with which the coasts of Gommera had been explored by the sounding-lead and the depths recorded.

* A fact.



“Lieutenant Graham was now studying the Gommara chart.”



HIS LESSON IN NET-MENDING.



"They formed a line, and grounded the butts of their rifles."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 319.)

GOMMERA rises up straight from the bottom of the sea. It is a great mountain belonging to that wonderful chain of submarine mountains whose peaks project from the water at the Canary Islands, the Cape Verde Islands, and the islands of Ascension and St. Helena. These are not a continuous chain, but they belong to the same group or family of submarine hills, and were, no doubt, in some past time due to the same volcanic agency.

Lieutenant Graham, studying the chart, saw at once that, drifting with the current along the south coast of the island, the *Kingfisher*, with the offing he intended to give her, would run no chance of grounding. Indeed, in most places one could run a battleship within a few yards of the cliff, leaving her water enough and plenty to float in.

Marking the position of the little town, and considering the rapidity of the drift, he calculated that, starting her at five from a position two miles to the east, the drift would take the vessel past the town at about nine o'clock in the morning.

The only thing that perplexed his mind was this: the islanders must have seen the ship drifting away—why had they not followed her in boats? Also, would they not be suspicious if they saw her come along on the same current that had taken her away?

He sought Teddy, who was drinking his coffee at the galley, and spoke to him on these two points.

'Well, sir,' said O'Brien, 'I can answer your first question easily enough. When the ship broke off from the cable and went adrift, Alonez and his crowd were away in the hills, hunting for us. The islanders saw us go right enough, but they have a horror of the sea;* they never go on it if they can help it. Of course, they have boats, but they only use them for fishing close in-shore. I've heard Mr. Toms, our cable engineer, say that there are hundreds of people here who have never been on the sea in their lives, and very few have ever been a voyage. As for chasing and boarding a ship, it is not in them. When they see her floating by again on the same current, they will put it down to some change in the current.'

'Well,' said the lieutenant, 'we have no more time to waste. Sawyer, order the furnaces to be drawn.'

'Ay, ay, sir!' replied the coxswain, going aft to repeat the order, whilst the lieutenant hailed the destroyer and ordered Greg to come aboard.

'Get a tow-rope round this deck-gear; it will give a good purchase,' said the lieutenant, 'and tow us at three cable-lengths dead slow. I have to take my distances by chance; but, anyhow, if we're even an hour late in keeping our appointment, it doesn't matter much.'

Greg got the rope ready and ran it round the deck-gear as directed; the end of the hawser was tied to a smaller rope, and the smaller rope flung into the pinnace, which started for the destroyer, dragging the hawser in its wake. The whole thing was done with an ease and celerity which made O'Brien marvel, and filled him with admiration for Royal Navy methods. There had now come into

the eastern sea a strange luminous appearance, as if the rays of the coming sun were struggling up through the waters. A faint tinge of lilac was in the eastern sky, against which Gommara stood black, looking like a great fortress built amidst the ocean.

The lieutenant looked at his watch; it was half-past four. He showed a light for a moment over the port-bow; it was the signal to proceed, and, in a minute or less the great hawser rose, sagging and dripping from the water as the pull came on it, groaned slightly as it tightened its clutch on the deck-gear, and, with the warbling sound of a ship being towed through calm water, the *Kingfisher* obeyed the summons, and followed in the wake of the destroyer over the brightening sea.

At five o'clock or a little after they reached the spot from which the drifting was to begin. It was six miles east of the little town where presumably Alonez and his followers still were, so that it would take them some three hours or more to come abreast of it.

'I'm undecided whether to have breakfast before we get them aboard, or to get them on board before we have breakfast,' said the lieutenant, as the tow-rope was cast off by the destroyer, which skimmed off at twenty knots towards the north cliffs of the island, there to hide till the signal-gun should bring her to the scene of action. 'I think, on the whole, we will have breakfast first. Breakfast at seven sharp, Sawyer. Now I will appoint the quarters.'

Sawyer's whistle shrilled, and ten blue-jackets in shore-going rig, each armed with a rifle, revolver, and cutlass, appeared.

'Fall in,' cried the lieutenant. They formed a line, and grounded the butts of their rifles with a crash on the deck.

Lieutenant Graham inspected each rifle and revolver minutely to see if the parts were in working order; then he appointed the stations.

(Continued on page 334.)

TRULY 'SCOTCH!'

A BARRISTER was examining a Scottish peasant. 'You affirm that when this happened you were just going home to a meal. Let us be quite clear on this point, because it is a very important one. Be good enough to tell me, sir, with as little prevarication as possible, what meal it was that you were going home to.'

'Ye wad like to know what meal it was?' said the Scotsman.

'Yes, sir, I should,' replied the counsel, sternly and impressively. 'Be sure you tell the truth.'

'Weel, then, it was just oat-meal!'

BIRDS OF PASSAGE.

THEY sojourn on a friendly shore,
Then plume their wing for flight once more;
They cross the sea on pinion strong,
To bless some other land with song.

Dear, quiet thoughts of peace and rest,
Oh, stay awhile within my breast;
Ere, like the birds, ye too depart,
To bless and cheer some other heart.

* This is one of the most curious facts about that curious people, the Canary Islanders.

A VANISHED SWORD.

MORE than a century ago—on May 17th, 1807—the sword of Frederick the Great was deposited, with great pomp and ceremony, at the Invalides, to the immense pleasure of the Parisians.

The first Napoleon Bonaparte had brought it to France. When, after the battle of Jena, Prussia was at his feet, Napoleon visited Potsdam, where he saw and took this sword. 'I value this,' he said, 'more than all the treasures of Prussia.'

In 1814, when the tide had turned, and the Allies were about to enter Paris, Marshal Serrurier, then Governor of the Invalides, received orders to take steps for the preservation of the trophies committed to his charge—especially the famous sword. The governor interpreted his instructions in a peculiar fashion, for, in order to prevent the treasures from falling into the enemy's hands, he made a bonfire of them! Between fifteen and sixteen hundred war flags, and other memorials of victory, perished in that bonfire. Their ashes and remains were flung into the Seine; and it was said that Marshal Serrurier threw into the flames, with the rest, the sword of Frederick the Great.

The sword, however, could not have been destroyed in the fire. In 1815, some bronze and copper articles were fished up from the bottom of the river, and returned to the Invalides, but the sword of the 'great' Frederick was never seen again.

PUZZLERS FOR WISE HEADS.

15.—PROSE CHARADE.

It is a difficult thing to find my first; it is not within, it is not at home, it is not in office; it is in a state of extinction, exhaustion, or destitution, it is ejected, it is expelled.

My second is sudden, alarming, and violent; most common in the aged and the very young; but it is also suitable, agreeable, and proper; dear alike to the man of fashion and to the beautiful lady.

My whole is indispensable, especially to the traveller.

[Answer on page 358.] C. J. B.

ANSWERS TO PUZZLES ON PAGE 283.

- | | |
|-------------------|----------------|
| 14.—1. Telegraph. | 4. Gramophone. |
| 2. Cinematograph. | 5. Telephone. |
| 3. Automobile. | 6. Typewriter. |

THE SLATE DRESSER.

LET us imagine that we are standing on the edge of a slate-quarry. Down below, in the great hole which the quarrymen have made in the hillside in the course of many generations, we see gangs of men at work. Some of them are perched upon little steps or ledges of rock on the quarry-sides, and are making small but deep holes into the solid slate with the help of long bars of iron which they hammer and pound into it. By-and-by, at a certain hour, charges of an explosive will be placed in these holes, and after warning has been given by the blowing of a horn, these charges will be fired, and great blocks

of slate will be loosened, and will come tumbling down, until they find a resting-place on some broader ledge or at the bottom of the quarry.

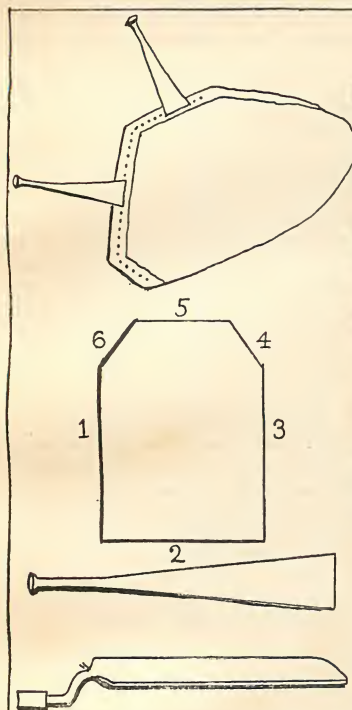
Wherever the huge blocks brought down by previous explosions have rested, other quarrymen are at work, breaking them up into smaller pieces with the aid of hammers and chisels. These smaller pieces (which must not be made too small, however) are loaded into trucks, and are brought up to the top of the quarry, where we are standing.

Let us follow one of these trucks, which has just come up. A man pushes it along a narrow railway to a little shed, which is built of small blocks or fragments from the quarry, laid together without any mortar. It would appear rather foolish to ask why this shed was built of these materials; but we could hardly give a satisfactory answer to this question without discovering something which we had not previously thought of. In order to be of any use for roofing houses and for other ordinary purposes, a slate must have a considerable size. But in obtaining blocks of this size, many smaller fragments are made. As slate is a hard, clean, and compact stone, these smaller pieces might very well be used for building purposes, were it not for the difficulty and expense of cutting them into neat square shapes like ordinary building stones or bricks. Take up one of these waste fragments, and try to break or chip it into a cubical form, and you will find that it shivers and splits into thin flakes or pieces, do what you will. A large block can, indeed, be sawn into a square shape, but if we were to saw up the fragments into little blocks, the cost would be so great that we should never be able to sell them at a profit. So these fragments remain as waste, and the quarrymen build their sheds and stables of them, because they are lying about and cost nothing. The workmanship looks very rough and inelegant, but it requires considerable skill to build a wall that will stand up straight without mortar.

The property of splitting into large, thin pieces, which are compact and strong, is the slate's best quality. It enables us to obtain a light, strong covering for our houses, a covering which can be supported on comparatively slender woodwork, which does not press too heavily upon the walls.

But it is time to follow the unloaded slates into the shed. There we find two men at work. A hasty glance is sufficient to show us that one of the workmen is splitting the blocks into thin pieces, and that the other is trimming or dressing them into the six-sided shape (like an upright oblong with its two top corners shaved off diagonally) which is proper for roofing-slates.

The splitter is seated on a block of slate; he has a wooden mallet and a peculiar-shaped instrument, called a hammer, but rather like a broad chisel; he gives this tool a gentle blow with the mallet in his right hand. The thin edge of the hammer enters the slab a little in the middle of its thickness, and we see a little crack run along the edge of the stone, dividing it somewhat as a paper-knife thrust into the pages of a closed book would divide it. The workman withdraws the edge of his hammer almost before we notice that the slab is splitting, and turning another edge up, he delivers a similar blow upon it. He does the



Tools and Pieces of Slate, showing
Method of Splitting
and Trimming.



Slate-dressers at Work.

same with the third and the fourth edges, but at the fourth blow all the cracks unite, and the slab falls in halves. Each half is split in the same way, and the splitting and re-splitting are continued until slates of the required thickness are obtained. The work looks exceedingly easy, but great judgment is required to decide at once where to split the slab, in order to make as few waste splinters as possible.

The slates, though they are now of the proper thickness, are still irregular in outline. The slate-dresser, whose duty it is to trim them to their proper shape, has in front of him an iron bar bent in the shape of a flat bridge, and having its ends inserted in the ground. He holds in his right hand a heavy thick-bladed knife, the tang of which is bent a little, like that of a trowel or a palette-knife, and is inserted in a wooden handle. Taking one of the slates which the splitter has laid down, he holds it with one edge resting on the bridge and projecting over it a little, and chops off at a blow or two all the overhanging portion, close to the edge of the iron bridge, thus leaving a long straight edge on the main piece. Turning the slate at right angles, he chops off the square end; and turning it again, he chops off another side parallel to the first. The remaining end is cut at three blows into a shape which resembles a triangle with its apex cut off, so that the finished slate has six sides. The work is done so quickly and so dexterously that we can hardly believe that it is hard or difficult. Yet there is a peculiar skill in

delivering the blow of the knife, which is more like a sword-cut than the blow of an axe, and it needs a well-trained eye to cut the slates to the right size and shape every time without any marks or measurement; and when I tell you that two of these workmen, a splitter and a dresser, can cut well over a thousand slates in a day, you will agree with me that they are skilful and industrious men in their own ways.

It is only when the slates are thin that they can be cut, as they really are cut, and not broken, in this way. It would be quite beyond the power of a man's arm to trim thick pieces, and these are, in fact, cut with a circular saw or a special machine.

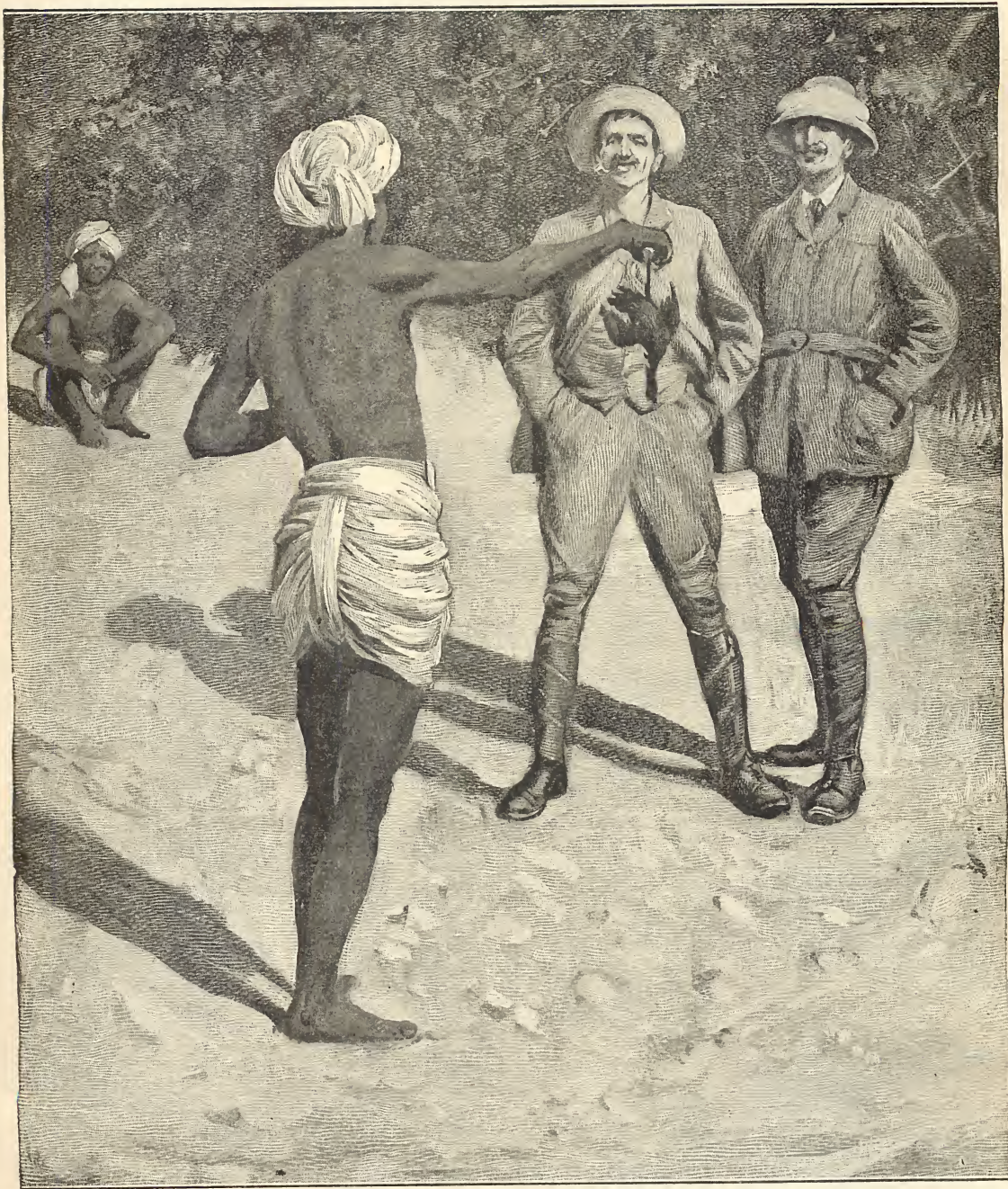
ROUND THE CAMP-FIRE.

IV.—THE MAN-EATER.

'A LOT of us young fellows,' Ralph began suddenly one night over the camp-fire, 'were stationed at Jampore, in Rajputana, which even "the youngest schoolboy," nay, even Bobby himself, will know——'

'I don't know anything except that I want to lie here in peace,' grunted Bobby, 'and that your voice is not a soothing one.'

Even Bobby will know (continued Ralph, undeterred) that Rajputana is in India. Some of us were



“‘Sahib shot this.’”

engineers employed upon the railway, some were otherwise engaged in making their living, and one was a stranger, a man who was, he told us, ‘seeing India’ with a view to writing a book.

‘There isn’t a real, good, what you may call standard, work upon the country, you see,’ he told us loftily, ‘and I have a kind of idea I could write one. I shall not attempt to get up my facts in a

week, you know—ha, ha!—as many fellows do who write books on foreign countries; I'm going to give the place a chance, study every district and nationality, if it takes me a year to do it. I shall really; I'm not joking. I promise you I intend to know something about my subject before I put pen to paper!

'That's so good of you, Billings,' said young Horsburgh. 'It is really quite encouraging to hear of a man who is prepared to take a little trouble over a subject, and we certainly *do* require a standard work on India. Still, a year's a long time to devote to any subject. I don't know that a person of your powers would need to sacrifice himself quite so long as that; after all, there's nothing very difficult about the subject of India; there are no problems that would offer difficulties to a mind of the first order.'

Billings looked at the speaker for a moment as though a doubt had passed through his brain whether he was not, in fact, being chaffed; but persons like Billings are not easily disturbed in their self-conceit, and probably he came to the conclusion that Mr. Horsburgh, like a sensible fellow, had recognised that he had come across a superior being.

'Yes,' he said; 'I don't expect much difficulty in the task I have undertaken.'

'You will send a copy of the book to our little club here, won't you,' suggested Bates, 'signed and all that? It shall be the beginning of our new library. At present we only have a paper or two on the table and nothing on the shelves.'

'Talking of sport,' said Billings, 'are you anything of sportsmen up here?'

'We haven't much big game,' said Bates, 'but there's plenty of black partridge and snipe and quail, and such things. Will your book include the subject of sport?'

'The work is to be all-embracing,' said Billings, grandly; 'nothing will be too unimportant to find place within my pages.'

'Now, that's the proper view for a fellow to take,' Horsburgh remarked, 'if he intends to write a great work such as yours, Billings. I think, boys, we ought to take Mr. Billings out for a few days' shooting in the jungle, hey? There's no knowing, we might possibly be able to show him something bigger than a black partridge—though, as he has told us, even a poor little quail will not be too insignificant for him.'

The others agreed to the proposal. Was I mistaken, or had I caught a wink from the left eye of Horsburgh as he made the suggestion?

'Thanks, you are very kind,' said Billings, flushing, I thought, a little. 'I have done a good deal of shooting one way and another, though I am not the best of shots, except perhaps with the rifle; unfortunately, I did not bring my gun.'

'Oh, we can lend you plenty!' some one said.

'And—er—is there any real chance of meeting with anything larger than a partridge?' asked Billings. 'You see, I should scarcely feel justified in spending more than a day or so over mere bird-shooting. If there were a chance of tigers, now, or of leopards—'

Bates, who had spoken once before, now suddenly made a statement which surprised me very

much. 'Of course, we can't exactly *promise*,' he said, 'but about once a year we seem to have a kind of influx of big game; it is said that they come for about a week and eat up all the young dogs and native children and foxes and things that they can find knocking around with nothing particular to do. They are supposed to be led—or at any rate accompanied—by a terrible old rascal of a tiger, a man-eater, known to the natives as Bagh-mahameerut, which means "The tiger with the greedy lips."'

At this moment I counted three hands go to three pockets and issue therefrom with three handkerchiefs, which were then and there applied vigorously to three noses. Horsburgh rose and walked to the window and looked out, while a young fellow of the name of Jones, a very clever engineer, made a weird kind of noise, half sneeze, half choke, and rushed out at the door, which he banged behind him.

As for Mr. Billings, his face, when I ventured to glance at it, was distinctly three shades paler.

'Ah,' he observed, 'if only this were the time Mr. Bag—what's his name?—usually selects for his hunting in this district!'

'Well, you might not like it. Bagh-mahameerut is by no means an agreeable fellow to meet in the jungle,' said Horsburgh, taking up the tale. 'As a matter of fact, many people, when they hear he is about, prefer to sit tight in their own bungalows. We don't, as a rule, go after him; but, oddly enough, we were going to make an expedition in a few days. You would like to join us, perhaps, Mr. Billings? We propose to start on Friday. Who knows, you might collect interesting matter for your great work?'

Billings accepted the offer with apparent joy. 'If I might have one day with you,' he said, 'amongst the partridges and snipe, I should be charmed and grateful as well.'

'Certainly, certainly,' replied Horsburgh. 'I cannot, of course, hold out much hope of meeting old Bagh Mahameerut, but—by-the-bye, have you done much big-game shooting?'

'Well, not a great deal,' Billings said, lamely. 'Still, I have done some. We should be prepared, I take it, to meet this man-eating tiger you speak of. We should carry ball cartridge?'

'Most certainly; it would not be safe without.'

Shortly after this we dispersed, and I walked to Horsburgh's bungalow with him.

'I suppose,' I murmured, 'there is more in this than appears? I mean, you are going to hoax Mr. Billings? But, as to this tiger, Bagh what's his name,' I asked, 'does he really exist?'

'My dear Ralph, what *do* you take me for? Of course he exists! Bagh has eaten several men, I am sure. Possibly he is not quite as brave or quite so savage as I made him out, but he is certainly a bad lot.'

'Look here, Tom Horsburgh,' said I, laughing, 'an end to this fooling. What are you going to do?'

Horsburgh gazed fixedly at me with his eye-glass in his left eye. The right one suddenly winked. 'Wait and see,' he said. 'We're going to have a tiger-hunt. I will tell you that much! We are going to teach that boastful ass a lesson.'

Friday saw the party of five starting for a dāk bungalow, or temporary shelter, lying in the midst of the jungle on the Ajmere road. This was a favourite spot with us, as it afforded an excellent centre for little shooting expeditions in the neighbourhood. Our party consisted of Horsburgh and myself, young Bates—who was, I may say, the companion in mischief of Horsburgh, another youth of the name of Swinburne, and Mr. Billings.

On the way Mr. Billings, who seemed in excellent spirits, was good enough to tell us many sporting tales. It appeared from his remarks that he had seen more big-game shooting than had at first appeared. He told several stories and adventures in which he had, according to his own version of the affairs, taken a leading part. It certainly appeared to me, in a vague sort of way, that I had heard some of these adventure-yarns before, and mentioning the matter to young Bates presently, I was surprised by his reply.

'That tale about the lions is one of Selous,' he said; 'so is that elephant yarn. The one about the hyenas is a very old one of Baker's. I don't know where he got that tiger story. It's rather a good one.'

'Do you mean to tell me,' I said, horrified, 'that Billings is calmly palming off other men's adventures upon us as his own?'

'Not a doubt of it,' said Bates. 'He's that kind of man—an arrant boaster. Didn't you get his measure on that first evening? Horsburgh and I did, and that's why we are going to—'

Bates paused. 'Go on,' I said.

'Well, I may as well tell you! We are going to punish Mr. Billings. I think we shall see that when our dear old Bagh-Mahameerut comes upon the scene, friend Billings will not behave quite so bravely as as he—or Mr. Selous—did on another occasion, of which he told us.'

'He deserves anything if he is really the sort of man you suspect!' I added.

'Suspect?' laughed Bates. 'There is no doubt of it! I have the book, and can show you chapter and verse!'

After this I felt no further sympathy for Mr. Billings. Let Horsburgh and Bates have their will with the fellow, I cared nothing.

Billings did not shine on the first morning of our shooting expedition. He went with a shikari (hunter), called Pondo, and brought back a bag of five birds, though from the amount of banging we had all heard, we quite expected to learn that he had killed five hundred.

'How many of these five did the sahib kill, Pondo?' asked Horsburgh of the grinning shikari, later.

'Sahib shot this,' said Pondo, holding up the remains of a much-mutilated black partridge. 'Sahib see him sit—he creep, creep, put gun so near—bang! Not much bird here—most feathers!'

'And the other four, Pondo?'

'The merciful sahib permit Pondo hold gun while he eat tiffin!' said the shikari, grinning so that his mouth looked like a great cavern full of shining white teeth.

'Pondo,' said Horsburgh, 'to-morrow the big tiger is coming back to this district.'

The shikari started and looked surprised, as well he might. 'How does the sahib know?' he murmured.

'We have promised Sahib Billings a tiger-hunt, Pondo, and, since we know of no tigers in the place, Sahib Bates is going to be a tiger for the occasion. Sahib Bates will lie in the long grass close to the tree in which you will sit with the other sahib, Billings, and suddenly Sahib Bates will shake the grass and roar; then, if he is not too frightened, Sahib Billings will shoot.'

'But, merciful and great one!' exclaimed Pondo, 'the Sahib Bates may be killed. Accidents happen.'

'Well, there is that mangled partridge, certainly,' said Horsburgh; 'but to make it quite safe I shall provide you with cartridges which are harmless, and you shall take care that the Sahib Billings shoots only with these. You shall load the rifle. When the sahib has fired, the tiger will doubtless roar, and will struggle very much in the long grass. You may even see a tiger's head, but fear nothing.'

'Sahib!' exclaimed Pondo, 'is it witchcraft?'

'Witchcraft? Nonsense. There will be a tiger's head provided—we have brought it with us. It will appear, I say, in order that Sahib Billings may be duly impressed. He is writing a great book upon India, you must understand, and it is necessary that he should see something of our chief sport.'

Pondo grinned from ear to ear.

'Do I bring the tiger's head to the sahib,' he asked, 'after cutting it off?'

'Not so; the tiger must escape, though badly wounded. Afterwards, perhaps, it shall be found, and its head cut off. Now, do you fully understand?'

Pondo begged for more instructions, and these were duly given him, after which he seemed fully satisfied. 'The sahib's commands shall be fulfilled,' he said.

(Concluded on page 342.)

THE CLOAK.

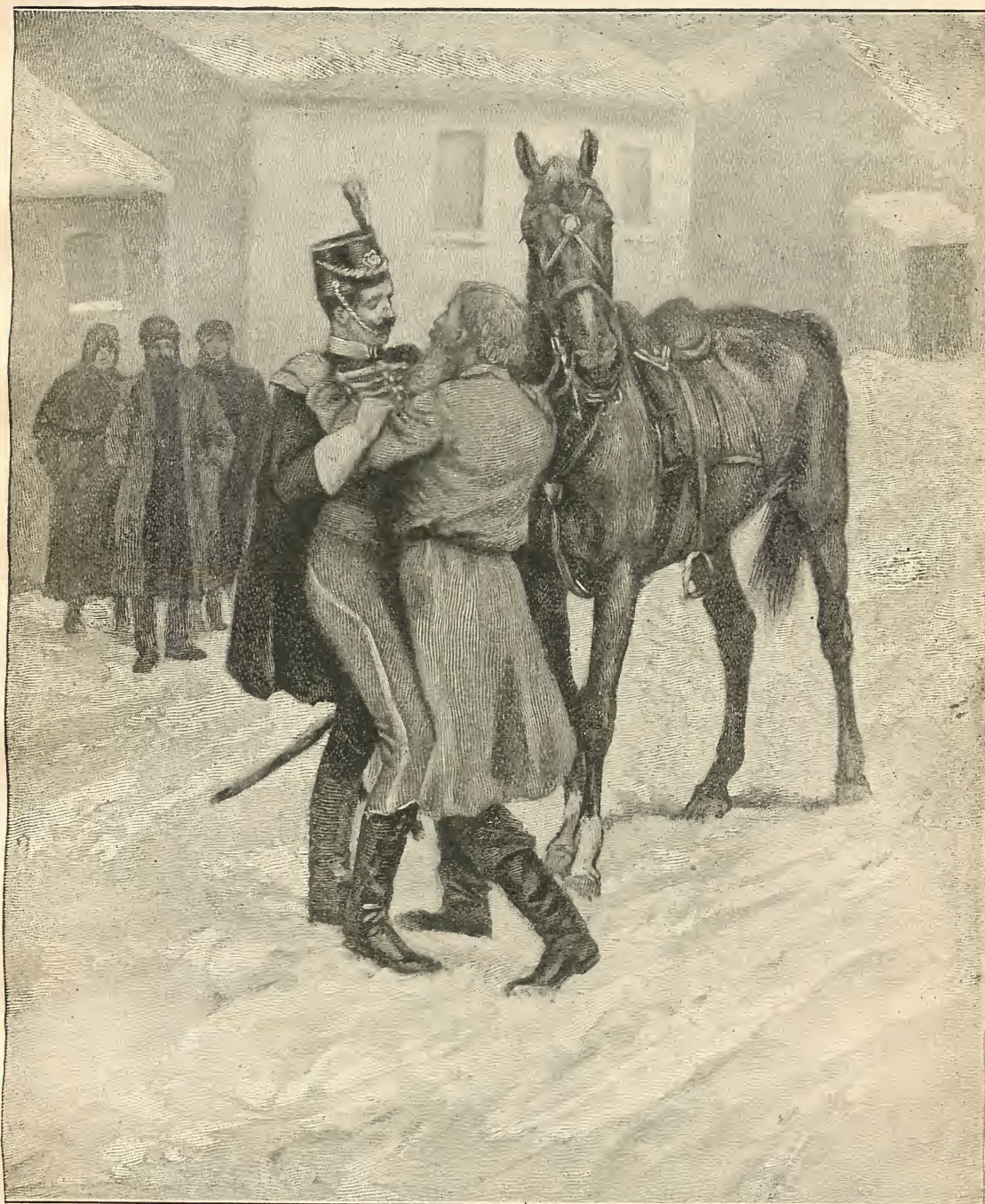
SOME soldiers came, during a war, into a little village, and asked for a guide. A poor labourer was chosen to go with them. As it was a bitterly cold night, he asked his neighbours to lend him a cloak, but they all refused. But an old man who had taken shelter in the village, and was an entire stranger to them all, took compassion on him, and lent him an old cloak.

They then set out, and, later in the day, a young, handsome officer came riding into the village, and asked to be conducted to the man who had lent the cloak to the guide.

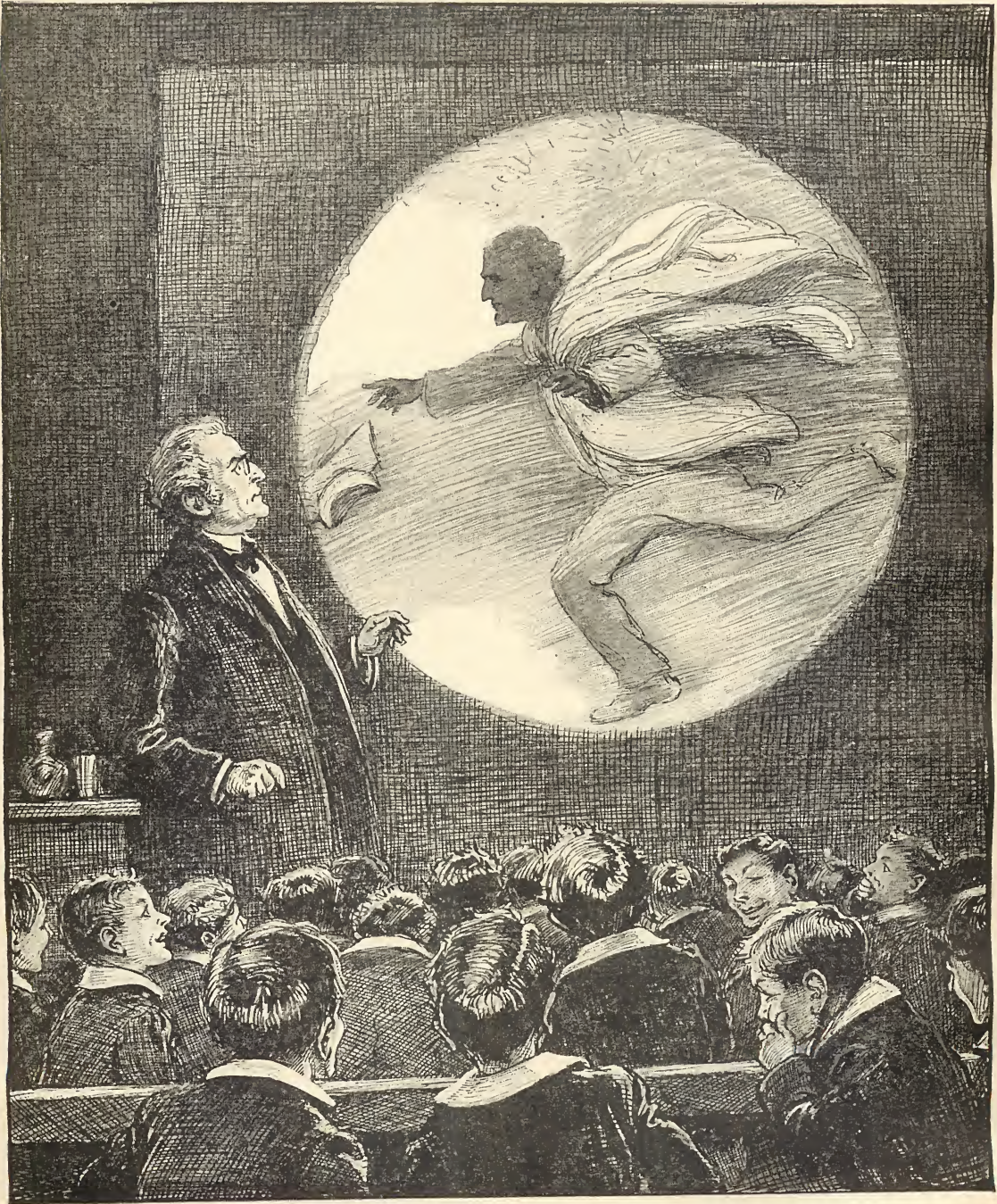
No sooner did the old man see him than he raised his hands and cried out, 'This is my dear son Rudolf!' He threw his arms about him, and held him to his breast.

Rudolf had fought through the war, and through his splendid courage and conduct had become an officer. He had long since given his father up for dead, and it was only through the guide's borrowing the cloak that they met again.

Father and son wept for joy. When, finally, he had to go, the young officer made provision for all his father's needs, and promised, if he were spared, to come and fetch him when the war was over.



““This is my dear son Rudolf!””



"On the sheet appeared the figure of Mr. Davidson."

IN SCHOOL AND OUT.

VI.—THE CAMERA CRAZE.

THE camera craze had it all its own way at Canbury. The tuck-shops spread out their dainties in vain before the boys, who were hurrying past to buy plates and chemicals, or saving up their money for cameras; and this is how the craze began.

The Easter term was half over, and the boys, who had been collecting stamps all the winter, were beginning to grow a little less keen on them, and wishing there was something fresh to collect, when Barnes started the brilliant idea of collecting photographs of every one connected with the Grammar School.

The craze spread, and any boy who succeeded in obtaining a good photograph of any other boy was besieged with applications for copies. Prices varied from a penny to threepence, or were paid in goods instead. Barnes even gave Meredith a real tiger's tooth, which had been one of his most cherished possessions, for a photograph of Jones Minor standing on one leg, gazing up at the ceiling, while he recited the 'Lays of Ancient Rome.'

But it was this photograph of Jones Minor which was the beginning of all the trouble. Meredith could not print copies fast enough, and, unfortunately, one of them fell into Mr. Davidson's hands. It was clear at a glance that the photograph had been taken in class. It was equally clear that the head master could not allow photographs to be taken at such a time. So Meredith had an unpleasant interview with Mr. Davidson in the study, and it was given out that any camera used in any part of the school buildings in school hours would be confiscated, and its owner kept in on half-holidays, for the rest of the term.

But the craze had grown so strong that the head master's threat had little effect. The covers of old school-books were used to form the outsides of mysterious boxes in which a small camera could be concealed, and, though no more photographs were taken while work was in progress, the boy who succeeded in snap-shotting a master in the gown and mortar-board that were only worn in school hours was looked upon as deserving of a V.C. at least.

Barnes, the originator of the whole scheme, had more pocket-money than any one else, and amassed the best collection, but three weeks before the end of the term he still lacked a good photograph of Mr. Davidson in cap and gown, for no one dared either to attempt to snap-shot the head master, or to ask him to stand for his portrait out of school hours. At last, in despair, Barnes offered five shillings for a successful photograph, and Meredith vowed to take one, 'or die in the attempt.' The rest of the boys amused themselves by conjuring up awful visions of what would happen to Meredith when he was caught, for they could not believe in any one pointing a camera at 'Bony' and escaping the detection of his eagle eye.

Nevertheless, Meredith succeeded. He was walking across the playground to the gymnasium with the lens of his camera peeping out through a hole in his school-bag when Mr. Davidson came towards him, tearing along at full speed, as was his usual

custom. Just as he came beautifully into focus, his mortar-board flew off, and, as he made a frantic dive after it, Meredith snap-shotted him.

The deed was done, and, what was more, it was done successfully. It was one of the best photographs Meredith had ever taken. He had not time to print a copy before breakfast, but he carried the precious negative to school with him, safely wrapped in a soft piece of paper that would not rub it.

During the first lesson that morning a junior master was busily engaged at a side-table arranging some lantern slides for a lecture that Mr. Davidson was going to give in the school-hall that evening; but just as the mathematical master had finished his lesson and collected his books, the other shut up the box of slides, and the two men went out of the room together.

Then came a short pause before the second lesson, and, while the third form was waiting for the French master to make his appearance, Meredith allowed a few of the boys to inspect his precious negative. Then, in an evil moment, it was passed down the class, and just as it had reached 'Fatty' Perkins, a boy who never did the right thing if it was possible to do the wrong one, Mr. Davidson's voice was heard outside.

Perkins looked round wildly, and then, instead of slipping the plate into his pocket or any other sensible place of safety, he opened the box of slides which was on the table beside his desk, and slipped it into a vacant place.

'Fatty! you silly juggins!' whispered his next-door neighbour; but it was too late to do anything, and the class watched in a state of horrified interest while the junior master explained to Mr. Davidson that all the slides were properly arranged for the evening lecture. Then the box with its precious contents was carried away, and the boys gave as much attention as they could spare to their French lesson.

When Mr. Davidson entered the hall that night, he was surprised to find what a number of boys were present to listen to his lecture on Greek Art. As a rule, one side of the hall was fairly filled with townspeople, but the day-boys were rather good hands at finding excuses to account for their absence from the school-benches. But the report of Fatty Perkins' unfortunate act had spread, and the boys mustered in force to see what the result would be. The boy who had been next to Perkins assured every one that Meredith's negative was the same size as the lantern slides, and would serve well as a lantern slide; so it was quite possible that the lecture would be a more exciting one than Mr. Davidson meant it to be.

He was an enthusiastic lecturer, and the boys, however much they might grumble at having to attend, usually ended by enjoying themselves. Then, too, there was always the excitement of watching the efforts of the man in charge of the lantern to keep in touch with the lecturer; for, in his excitement, Mr. Davidson frequently omitted to give any signal for changing the slides, and as frequently forgot to make any reference to the picture that was being thrown on the sheet.

A series of photographs of the best pieces of Greek sculpture had been exhibited, and, after the last, Mr. Davidson announced, 'The next picture—a piece of modern sculpture—will show you the difference between good art and bad. In it, grace has given way to grotesqueness, and every line that should be beautifully curved is twisted into an ugly angle. Yes, it is truly laughable,' he went on as the faces nearest him broadened into a smile, and an audible titter was heard from the school-benches. Then Mr. Davidson turned to point out fresh defects in the illustration just as the man in charge of the lantern was hastily changing it.

'I'll trouble you for that last slide again,' he said.

The man hesitated a moment, and then on the sheet appeared the figure of Mr. Davidson. As, however, it was taken from a negative instead of a positive plate, all the lights and shades were reversed. With black face, hands, and hair, the head master was swooping after a white mortar-board, while a white gown was streaming out behind him. He had rightly described the slide: the angles of the figure *were* ugly, and its second appearance was greeted by a badly-concealed shout of laughter. The boys nearest the platform declared that even Mr. Davidson's shoulders were shaking as he examined the photograph, but it was with a perfectly grave face that he turned again to the audience.

'I was speaking more truly than I knew,' he observed calmly. 'The lines of the figure are, as I mentioned, quite grotesque, proving, I think, that photography can hardly be called an art at all. However, as I shall have a few words to say on the subject of photography to-morrow, I will now continue. Another slide, please!'

The next morning before prayers, the boys, as they discussed the lecture, agreed that it was the best entertainment they had ever had. Later on, however, some of them were inclined to think that the pleasure had not been worth the punishment that followed.

'Boys,' began the head master after prayers, 'I have had to speak to you before about this photography business, and the way in which you have allowed it to take up all your time and thoughts. The craze has made you give more attention to your amusements than to your work, and, as you know well, the boy or man who does that is of no use to himself or any one else. Most of the boys possessing cameras are at least ten places lower in their classes than they ought to be. I find, too, that, in defiance of my order, cameras are still being used in the school buildings in school hours, and I intend to put a stop to it. I had the pleasure of inspecting Barnes's collection last night, and I find that there are at least twenty-five photographs there which have been taken in forbidden hours. Will the boys who took them kindly step forward? By so doing they will save the whole school from being kept in on half-holidays for the rest of the term.'

Nine melancholy boys stepped out bravely from the benches, and for the next week the same nine were occupied in printing and fixing photographs in all their spare minutes, for there were to be no half-holidays for them till Mr. Davidson had received a dozen copies of each of the offending pictures.

Meredith fared the worst, for six of the photographs were his work, and Mr. Davidson had also ordered an extra dozen of the one that had appeared as a lantern slide. But, luckily for Meredith, the sun shone forth bravely, and ten days later, on the morning of the annual football match with the town, he was able to hand in a neat packet of photographs to the head master.

But the camera craze at Canbury was killed, and the boys had time to attend to their work again.

A. KATHARINE PARKES.

AN ADVENTURE WITH A BEAR.

THE great Cinnamon Bear of the Canadian Rockies is a creature that commands fear and respect. He stands easily first among the animals of Canada that are labelled 'dangerous.' Black bears are common in the eastern provinces of Canada, and in outlying districts are a source of much annoyance to the farmers. They have an especial fondness for mutton. They occasionally attack cattle, but, as a general rule, shuffle off to safe retreat on the approach of a hunter. This is, however, an uncertain characteristic, and not to be relied upon to the extent of going unarmed through bear-haunts. The bears come forth quite ravenous from their long winter sleep, and are then ready to use fully their cunning and ferocity.

Some years ago a lad in a backwoods settlement had a most thrilling encounter with a black bear. The lad, fifteen years of age, was driving home the cows from a woodland pasture. The cattle scented the bear, and were wild and hard to keep in the narrow, winding path. The boy dashed after them through the scrubby fir underbrush, and, turning suddenly, came face to face with a huge black bear. The lad's only weapon of defence was a birch switch, and the bear, surprised at the encounter, bristled for fight. His lips curled back from his huge white teeth, and with a snarl he advanced rapidly upon the boy.

As a rule, the Canadian boy is resourceful in an emergency, and this one was no exception. He knew that the thick underbrush barred his escape. The bear could crash easily through it. He must climb for safety. He seized a limb of a fir near at hand, and was soon speeding to the top. It was a movement that did not please the enemy. There was a succession of furious choking growls, as if in disgust at the exertion that must be made in the pursuit; then the bear, swinging himself up, climbed like an expert. The boy climbed, and Bruin followed, until the highest point was reached, and the slender top bent and creaked under the *weight of boy and bear*.

As he retreated, the boy had kept up a wild cry for help. The evening was calm, and the sound carried to the farm buildings, where his father and the farm-hand were impatiently waiting his return. They recognised the meaning of the call for help. The farmer snatched his gun and the man an axe, and, with a shot as a signal, they tore off to the rescue.

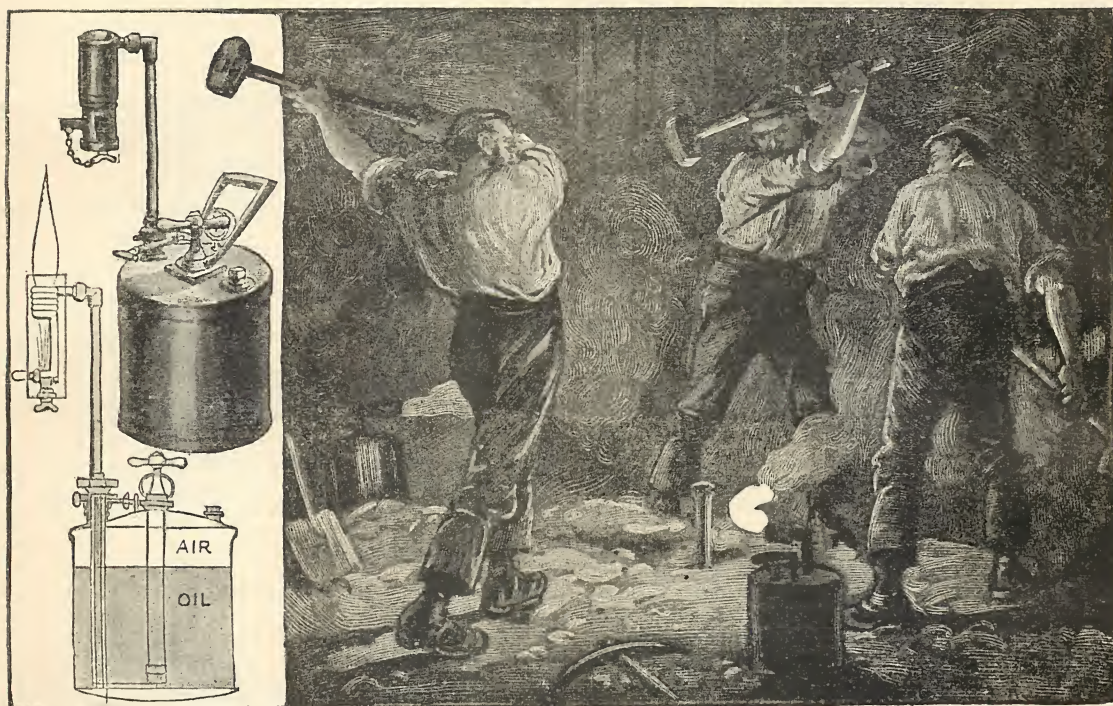
The boy had reached the very top of the tree; his feet were within reach of the ill-tempered brute, whose long, sharp claws tore them. The boy, in spite of terror and pain, still held pluckily on. The bear loosened his grip to make a bound at his victim.



"He must climb for safety."

The shouts of the farmer and his man created a diversion, and a well-aimed shot from the farmer's rifle brought the brute to the ground, and another dispatched him. The farmer and the man got the

injured boy from the tree and carried him home. The summer season had slipped into autumn, and winter had driven the bears to their safe retreats, before he was again able to walk and go about his work.



Contractor's Oil-gas Lamp,
with section.

Oil-gas Lamps in Use.

INSTEAD OF THE SUN.

X.—OIL-GAS.

THERE is a kind of lamp, much used by hawkers and showmen, which is well worthy of a little study, because it is a good and simple illustration of a novel means of obtaining a powerful light, which may be moved from place to place.

This lamp has a rather deep, round can, which is in shape rather like a very large spinning-top. At the bottom of the can, where the peg of the top would be, a slender tube is inserted, which, after going straight downwards for a foot or more, turns at right-angles, and ends in a peculiar kind of burner. There is a tap similar to an ordinary gas-tap in the upright part of the tube, and we can see at a glance that the oil of the lamp is stored in the can, and is admitted to the burner by opening the tap. At the top of the can there is a hook by which the lamp may be suspended to any convenient part of a stall or van.

The strangest part of the lamp is the burner. It consists chiefly of a pipe bent in the form of a rather square-shaped letter G. On the upper part of this pipe there is usually a flat, circular plate of iron, and below this there is a rather smaller ring which is joined to the plate by a number of upright bars or stays; the whole forming a sort of openwork basket placed cross-wise in the upper part of the G. The course for the oil is along the G-shaped pipe and out into the air through a hole or burner in the centre of

the basket. In some forms of these burners, however, the basket is made large and in some parts hollow, so that the oil may flow through the basket in very much the same way that it flows in other burners through the G-shaped pipe.

But though there is in every case an open course for the oil to take, the oil itself never passes through it. If you were to watch a man lighting one of these lamps, you would not see him put a lighted match to the hole of the burner, as he would in lighting an ordinary gas-light. Instead of doing so, he holds the burner of his lamp in the flaming light of a little pile of burning paper, and you would find that the lamp does not light until the burner becomes hot—not, of course, red-hot, but far too hot to be touched. When the burner becomes hot, the oil which is in the G-shaped pipe begins to boil, and turns to vapour or oil-gas, and this rushes out of the burner, as if it were steam, and, catching fire, burns with a large, white, flickering flame. As it burns, it keeps up the heat of the pipe through which the oil is flowing, and thus the fresh oil, as it arrives, is vapourised, and maintains the supply of oil-gas. The flat top and the little bars of the basket-shaped burner are designed to spread the flame, in order that it may heat the pipe more effectively.

It often happens that railway-makers, bridge-builders, and other contractors for large undertakings are pressed for time, and must if possible keep men working through the night. On these occasions powerful lights must be provided to light up the

scene of operations, so that the men may work and move from place to place as quickly and safely as possible. If the undertaking is one which will occupy a considerable time, engines and dynamos are brought, and electric arc-lamps are employed. But if the work is of a temporary kind, the contractors usually rely upon a large kind of oil-gas lamp, of which there are several sorts known by various names, such as comet-lights and lucigens. Though these are very different in appearance from the showman's lamp which I have just described, they are the same in principle.

A lamp of this kind consists of a closed copper cylinder, resembling a small upright boiler. From the top of this boiler rises a tube, which ends in a large burner surrounded by a wrought-iron box or case. The upper part of the burner is coiled, and the opening through which the oil-gas issues is at the bottom, so that the flame plays on the upper part of the burner, through which the oil passes on its way outwards. It is clear that when the oil is forced up the tube to the burner, it is vapourised and burned in the same way as in the showman's lamp, but in much larger quantities.

'But how is the oil forced up the tube?' you will ask. It is stored, of course, in the copper cylinder, which may hold several gallons. In order to learn how the oil is driven up, let us look at a syphon of mineral water, such as any chemist supplies. It is a strong glass bottle with a narrow neck and a metal top, which has on one side a spout and on the other a little handle. Looking through the side of the bottle, we see within it a straight glass tube, which extends from near the bottom of the syphon to the metal cap at the top. The mineral water in a full syphon never reaches quite to the top of the glass. The space between the surface of the water and the top of the glass is filled with a strongly compressed gas, and when we press the handle of the syphon, and thus open a way for the water to come out, the gas pressing on the surface of the water forces it up the glass tube and out of the spout in a strong hissing stream.

If the cylinder of a comet-light were made of glass, so that we could look inside it, we should see that it was very much like a mineral-water syphon. There is a space above the surface of the oil, and on the top of the cylinder there is a pump, by means of which air may be forced into this space, until there is a great pressure of it. The upright tube leading to the burner extends downwards to the bottom of the cylinder, like the glass tube in the syphon. When, therefore, the tap of this tube is opened, the compressed air forces the oil up the pipe to the burner. If you were to see one of these lights at work, you would notice that from time to time a workman would pump air into the cylinder, in order to keep up the pressure as the oil diminished and the air-space increased.

When one of these contractor's lamps is to be lighted, a workman soaks a ball of cotton-waste in paraffin, sets it on fire, and places it in the burner of the lamp. When the burner is made hot, the oil vapourises, and the vapour or gas takes fire. The heat of the light is then sufficient to keep the burner hot.

W. A. ATKINSON.

A GUILTY CONSCIENCE.

THE stars were brightly shining, and the song-birds were asleep,

The midnight wind was sighing in the trees,
When Reynard whispered softly, 'Through the farm-
yard I will creep,
And help myself to anything I please.

'A duckling or a tender chick would suit me "to a T;"

A good old hen would even be a treat;
I wouldn't mind a turkey, for I'm hungry as can be,
And hunger makes a fox's supper sweet.'

Away sped Master Reynard till his footsteps gained the farm;

Said he, 'Now for a little bit of fun;
The only thing that causes me a feeling of alarm
Is, lest old Farmer Giles should fire his gun.'

Said Mrs. Owl, who listened in the quiet leafy shade,
'Is that the only danger, sir, you fear?

I think, good Master Reynard, I can stop your little raid

It is my bounden duty, that is clear.'

There fell upon the midnight air a loud 'Tu-whit,
tu-whoo!'

It woke from peaceful dreams old Mother Hen,
'Whatever is the matter?' cried each Cock-a-doodle-
doo,

And crowed his very loudest, there and then.

Alas! for Reynard's daring: he was startled by an owl,

A guilty conscience made him turn and run;
And so were saved the precious lives of duckling and
of fowl,

And so was ended Reynard's bit of fun.

M. I. HURRELL.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 322.)

THE object of Lieutenant Graham's plan was concealment till the enemy were on board, so he appointed three men to the paying-out office, three to the steam steering-gear house, the crack shot of the destroyer to the chart-house, whence he could watch the fight, and, if necessary, pick off any man who was giving too much trouble; and three men to sit and cool their heels on the saloon staircase. The rifles were only to be used if the enemy made a rush off the ship and attempted to get away by boat or swimming. All the deck-fighting was to be done with marlinspike and cutlass, and no blood spilt if possible.

The crack shot of the destroyer was the redoubtable Sawyer, who was at that moment making preparations for breakfast in the galley. He was to watch behind the curtains of the chart-house after-window till the last man of the enemy was on board; the sound of his whistle was to give the signal for the attack.

O'Brien, who was to act as bait, was to cross the

bridge several times in full view, and then join Sawyer in the chart-house.

Marley was to remain in the chart-house also, for the lieutenant said he did not want any boys to look after in an affair of this sort.

This disposition did not at all please either Marley or O'Brien, but Lieutenant Graham was not a man to be argued with; so they did not argue, but armed themselves with a couple of the spare revolvers in case of need.

The drift of the current was everything that could be wished. At six o'clock they were abreast of the north headland of the island, exactly a mile from shore, and at half-past six they were a good mile down the coast, keeping their proper distance without danger of grounding. At seven the progress was equally satisfactory.

'I feel sure,' said the lieutenant as they went down to breakfast, 'if you could see her from the shore she would look the image of a deserted ship, and if those rascals don't come off in the natives' canoes, I can only say there's something wrong with the working parts of the affair not visible to the naked eye.'

'What will they do with Alonez, sir, if we get him to Teneriffe?' asked Teddy.

'Hang him, to a dead certainty, or rather, I should say, garotte him, for that's the way they manage in Spain, and a very ugly way it is. Mutiny and piracy on the high seas are capital offences. Have some grilled turkey?'

Breakfast only took twenty minutes, and then the hands were piped and stations taken.

As the boys were going off to take up their position in the chart-house, Lieutenant Graham called them back. 'I forgot to give you your full orders,' he said. 'You are not to leave the spar-deck on any condition if there is a fight.'

'But, sir,' said O'Brien, 'if they are getting the better of it—'

'Oh, in that case you can do what you please, but I don't think that will happen! Now to quarters.'

Sawyer, who had washed himself and had a rub down since cooking the breakfast, looked as neat as a new pin. He had laid his rifle on the chart-house table, and was looking through the starboard window at the coast of the island as they drifted past it.

'Well, Sawyer,' said O'Brien, 'we are all stuck here like hens in a coop. Isn't it a nuisance? Mr. Graham has given us strict orders not to join in unless he's being beaten.'

'I can't say I like this picking-off business myself, sir,' said Sawyer. 'If there's a shindy on, I like to be in the middle of it, not on the skirt, but Mr. Graham knows his business, and doesn't want to be hampered. Now, boys or women—meaning no offence—in a fight lead to more harm than anything I know of, for they get in the way, and make opportunities for side-blows and diversions. Mr. Graham has given orders to use the flats of the cutlasses as much as possible and fists instead of revolvers, for, you see, we have no doctor on board, and it would be mere cruelty to hurt them more seriously than necessary.'

From the chart-house a splendid view of the island could be obtained, and O'Brien, who now knew the

coast fairly well, gave it as his opinion that in another ten minutes or so they would reach the little bay where the town lay.

'Here we are at last,' he suddenly said. 'I know that cliff—yes, that's the bay opening. I will go on the bridge.'

The arrangement was that Sawyer was to give one blast on his whistle when the town was sighted, another when the boats were seen to start, and a third when the enemy were well on board.

Teddy left for the bridge, and Marley and Sawyer kept observation from the windows. Then the beach and houses of the little town slowly drew into view, and Sawyer gave his first signal.

The *Kingfisher* drifted along lazily on the current, looking from the shore the very picture of a deserted vessel.

Marley, who had the lieutenant's marine-glasses, focussed them on the beach. It was empty, save for a couple of girls who were doing something to a net. He could see the whale-boat and the quarter-boat and the dinghy beached.

The two girls at the net suddenly stood up and drew close together. They had evidently observed the ship.

Then one of the girls hastily ran up the beach and disappeared.

Marley told Sawyer of this, and Sawyer chuckled.

'Whew!' cried Marley in an excited voice. 'Here they come, here they come, pouring down on the beach, the whole crowd, Diego and Alonez and the lot! They are running the whale-boat out, and there are a lot of women and people looking on; now Diego and Alonez are in the boat, now the lot of them are in, and they are getting the oars out. Boats away, Sawyer!'

Sawyer's shrill whistle sounded through the silent ship.

'They're coming,' said Teddy bursting into the chart-house. 'Isn't it fine—the whole crowd of them?'

'How many did you reckon got into the boat, sir?' asked Sawyer.

'Twenty, at least,' replied Marley: 'they have several of the islanders with them, I think.'

Then nothing more was said whilst they watched the whale-boat slowly approaching. It was full of men. It vanished from sight round the bow of the ship, making for the port quarter.

The side companion-way had been left down, so as to give them an easy access to the deck.

'Hark!' said the coxswain, placing his whistle to his lips and propping the chart-house door open, whilst he stood behind the curtain of its forward window.

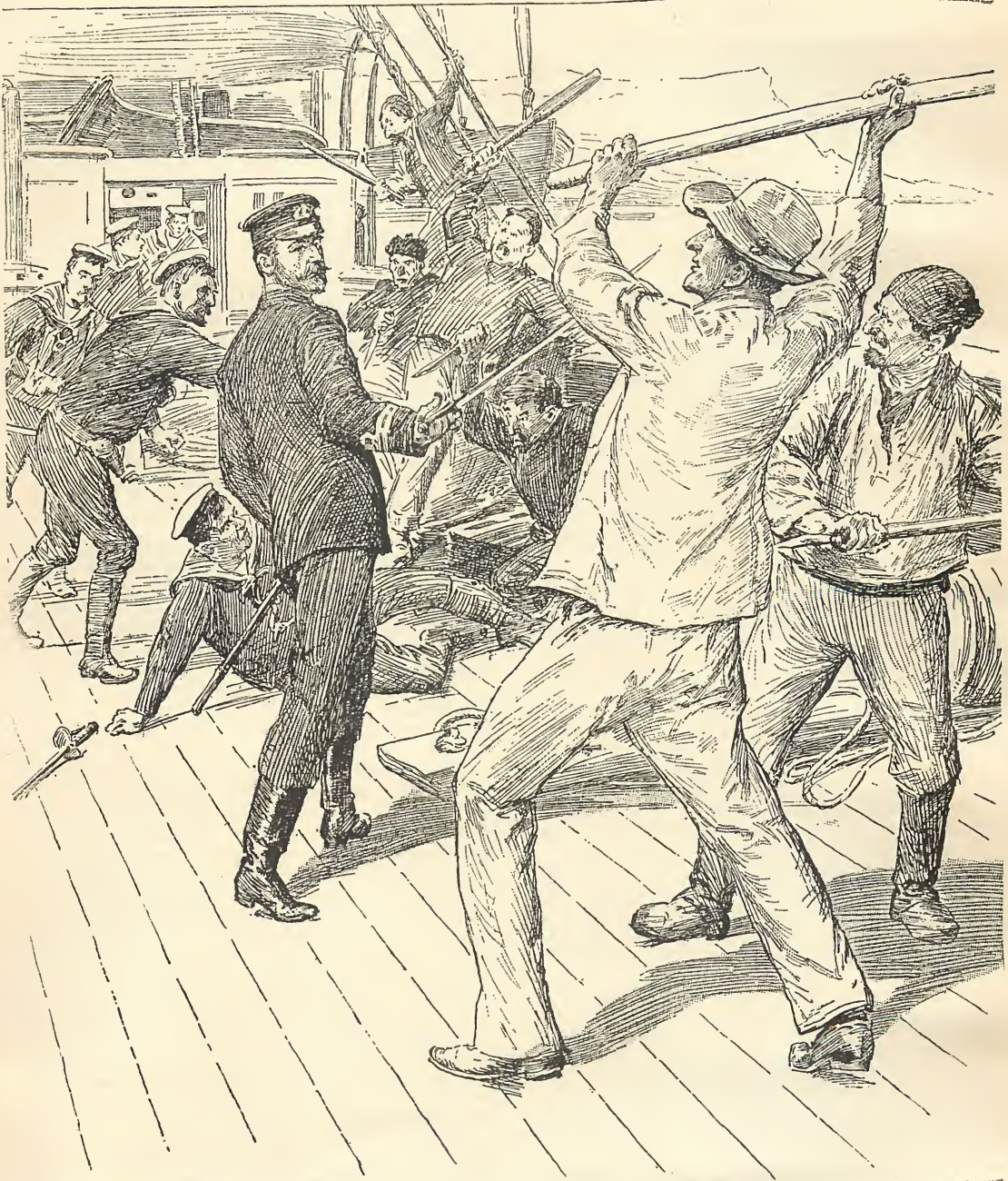
The noise of a boat touching the grating, and the loud sound of voices laughing and talking, came from the side of the ship. Then the rush of feet up the ladder, and Alonez and Diego burst on to the deck, followed by their crew.

They stood for a second looking this way and that about the empty spaces around them, and were just on the point of breaking up into search-parties to ransack the ship, when the whistle of the coxswain sounded.

(Continued on page 338.)



“They watched the whale-boat slowly approaching.”



"Alonez made for Lieutenant Graham."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 335.)

CHAPTER XXVIII.—IN THE TRAP.

NO magic whistle ever produced so strange a result as the sound of Sawyer's whistle. Before the eyes of the astonished Spaniards, the decks of the *Kingfisher* seemed suddenly to swarm with armed men. The bluejackets burst from the paying-out office, saloon stairway, and steam steering-gear house, and converged in three parties upon the horde of ruffians who were now standing with their backs to the bulwarks, hemmed in, unable to turn to retreat, and fighting like dogs attacked by wolves.

But they were dogs led by a lion.

Alonez had come on board with a boat-hook in his hand; he had no time to draw his pistol; seizing the boat-hook in both hands and using it now as a club, now as a spear, he made for Lieutenant Graham. His eighteen followers split up into three parties, and fiercely attacked the English sailors, whose cutlasses made flying circles in the air, striking hither and thither, at first with the flats, then, as the fight waxed hotter and the Spaniards got a few knife-thrusts home, with points and blades.

Some of the Spaniards had seized belaying-pins from the bulwarks, with which they warded off the cutlass blows; others simply dodged and ducked, flinging themselves on the deck, dragging their opponents down by the legs, rolling together pell-mell and striking with their murderous knives with such ferocity that one of these knives was found afterwards sticking half embedded in the deck-planks.

O'Brien and Marley stood watching from the spar-deck, spell-bound and horrified. Sawyer, with a quite calm face, was on one knee, his rifle to his shoulder, watching the fight. His entire attention was occupied by Alonez and Lieutenant Graham, who had a corner of the deck to themselves. Alonez had warded off three or four cuts of the lieutenant's sword, and was in the act of dodging another when he stumbled and fell on one knee; at this moment, Diego, with a long knife in his hand, slipped behind Mr. Graham, and in a second more would have struck, when Sawyer's rifle cracked and Diego, shot through the leg, fell all of a heap. At the same moment, Mr. Graham's sword came down flat on Alonez's head, stretching him senseless.

Then Sawyer sprang to his feet. The fight had begun to fill him with fury. Standing with the rifle to his shoulder he began to shoot at the Spaniards remaining with a certain aim, laming each one without inflicting serious injury. Then he stopped. The magazine of his rifle was empty, and the few remaining ruffians were shouting for mercy.

'Cease firing on the spar-deck, there!' shouted the lieutenant.

'Ay, ay, sir!' replied Sawyer, resting his weapon against the rail. He wiped his forehead with the sleeve of his jacket. 'Well,' he said, speaking with a dazed expression on his face, 'I do declare, I feel like a man woke up from a dream.'

Down below, the lieutenant had replaced his sword in the scabbard, and was looking round him.

The Spaniards who were not wounded threw down their arms; the rest were roughly bandaged; there was no vital injury among them. The Englishmen had not suffered much, though two or three had nasty flesh-wounds from the enemies' knives.

'You were right to begin firing,' said Mr. Graham to Sawyer, who had now come up; 'the thing was getting too hot. Now put a blank cartridge into the quick-firer, and signal the destroyer to come up.'

A minute later the bang of the gun sounded, and was taken up by the echoes of the hills, ending in a sound like the roll of drums.

The prisoners, including Alonez, who had recovered consciousness, were roped together and marched down to the cable-deck, where they were placed under guard of a bluejacket, the decks were washed down, and in a quarter of an hour all traces of the wild scene that had been enacted were removed.

'Well, O'Brien, what did you think of the shindy?' asked Mr. Graham, when he had time to glance around him.

'It looked hot work from the spar-deck,' said Teddy.

'And——'

'Well?'

'Well,' said Teddy, 'I must confess that for awhile I was jolly glad to be on the spar-deck and out of it.'

Mr. Graham laughed. 'You were not far wrong,' said he.

As they returned, the destroyer was sighted coming at full speed. In a very short time she was alongside, and had dropped a boat. The *Kingfisher* was still floating with the current; they had dropped the little town behind them, and when Greg came on board and saluted, he glanced round the clean white deck with a disappointed air.

'Well, Greg, what are you looking for?' asked Mr. Graham.

'So you didn't manage to bottle them, sir?' said Greg.

'Oh, yes, we did; and I have some prisoners below, all alive and kicking, including the queen-bee—in other words, the man Alonez. But, hurry up, now, and send a message to the villagers that the whole affair will be reported to the authorities at Teneriffe, and that they are sure to be punished by the Spanish Government for helping these ruffians.'

'Hooray!' cried Teddy, who had been leaning over the side watching the destroyer transshipping her second engineer and more stokers to the cable-ship. 'Now we shan't be long! It is only a few hours from here to Teneriffe, and to think, Dick, that we have pulled the affair through, caught Alonez, and saved the old *Kingfisher*, and made a fortune between us! I can't believe it, but it's true! Mr. Graham says there won't be any trouble about the salvage money—*can't* be, for our claim is too good. Come here, Sloper, and let's jubilate.'

Sloper, who had hidden somewhere during the fight, was now sunning himself on deck. Teddy took him by the hands, and waltzed him round and round the deck.

He had just declared that he and Marley had saved the *Kingfisher*. At this moment a deep roll of the ship as she leaned to a sudden heave of the swell seemed to reply, 'Have you?'

(Continued on page 351.)

THE COMPASS PLANT.

THIS curious plant grows in America. When, in 1842, General Alvord wrote home from the Mississippi valley saying that he had discovered it, nobody at first believed him. But he soon proved the truth of his statement. Then a well-known botanist looked into the matter, and saw for himself that there really was such a plant, and that, by the action of light, its largest leaves did, in midsummer, point pretty nearly north and south.

Long before General Alvord wrote about the plant, it was known to the Indians and pioneers. There is a terrible Indian legend associated with it.

Agès ago—so runs the story—one tribe of Indians came secretly upon another tribe, massacred all the men, and carried the women and children into captivity. Only one child—a boy—escaped. In the long prairie grass he hid until his enemies were out of sight. Then he crept out to watch the flames devouring the wigwams of his people.

He sat by the side of his own ruined home. Presently he saw a strange plant spring out of the earth and grow before his eyes. With deep interest he watched it, and, when it had ceased growing, examined it carefully. At first he saw nothing remarkable about it, but presently he noticed that some of its leaves pointed exactly in the direction taken by the enemy, and that others pointed in the opposite direction.

The boy thought this meant that he was to go in the direction indicated by the leaves—those, of course, which pointed *away* from his foes. Off he went, and whenever he woke after lying down to rest and sleep, he always saw one of these guiding plants growing beside him.

On and on he went, until he came to an Indian encampment. This was a strange tribe to him, and he watched the men from a safe distance until he had ascertained that, although strong and active, they did not know so well as he did how to set a snare, to make a bow, or to guide a horse.

Boldly, then, he walked in amongst them, and offered to teach them the things he knew. Great was his success. Although he was but a boy, the strangers, wondering at his skill and knowledge, showed him deep respect. Honours were showered upon him; higher and higher he rose, until at last he became their chief. Then he told that which for so long had been hidden in his heart. He wanted to punish the tribe that had treated his people so cruelly.

The chief's word was law. His followers were ready to measure their strength and skill against that of another tribe. So they put on their war-paint, sharpened their knives and arrows, said farewell to their squaws, and set out for the south.

And there again was the compass plant always in the chief's path, pointing now in the direction of his foes. After many days he and his followers reached the fatal spot where the massacre had taken place, and the chief knew where his father's wigwam had been by the flower that stood there, pointing in the same direction as the others.

The journey now was nearly ended. The sought-for tribe was not far distant, and when the northern warriors came upon it, they simply exterminated it.

A far pleasanter story than this tale of revenge is told in connection with the compass plant. It is about a white boy called Zeke. One day, Zeke and his little sister Hannah wandered out on the prairie, and got lost. This happened, of course, very long ago, when Indiana was but thinly populated.

Zeke was not at all like the young Red Indian; having wandered about aimlessly for some hours, and heart-broken by his sister's sobs, he sat down and cried. Then Hannah fairly shrieked, and Zeke left off crying and tried to soothe her.

He succeeded in comforting her, but both children were very hungry, and they had to spend the night on the prairie. Happily, Zeke had a good sleep, and when he awoke in the morning he could think better. To please Hannah, he plucked one of the compass plant's pretty flowers, and gave it to her to play with. As he did so, he suddenly remembered what his father had told him about the use of the plant. With a shout of joy, he took Hannah's hand and walked towards the West. The compass plant had shown him the way, and he knew that by keeping on in that direction he would come in time to the Mississippi River, and that there he would be sure to find some kind person to send him and Hannah home.

And so indeed it came about. The boy and girl were restored to their parents, who had given up all hope of ever again seeing their lost children. We may be sure that after this experience the favourite flower of the family was that of the compass plant.

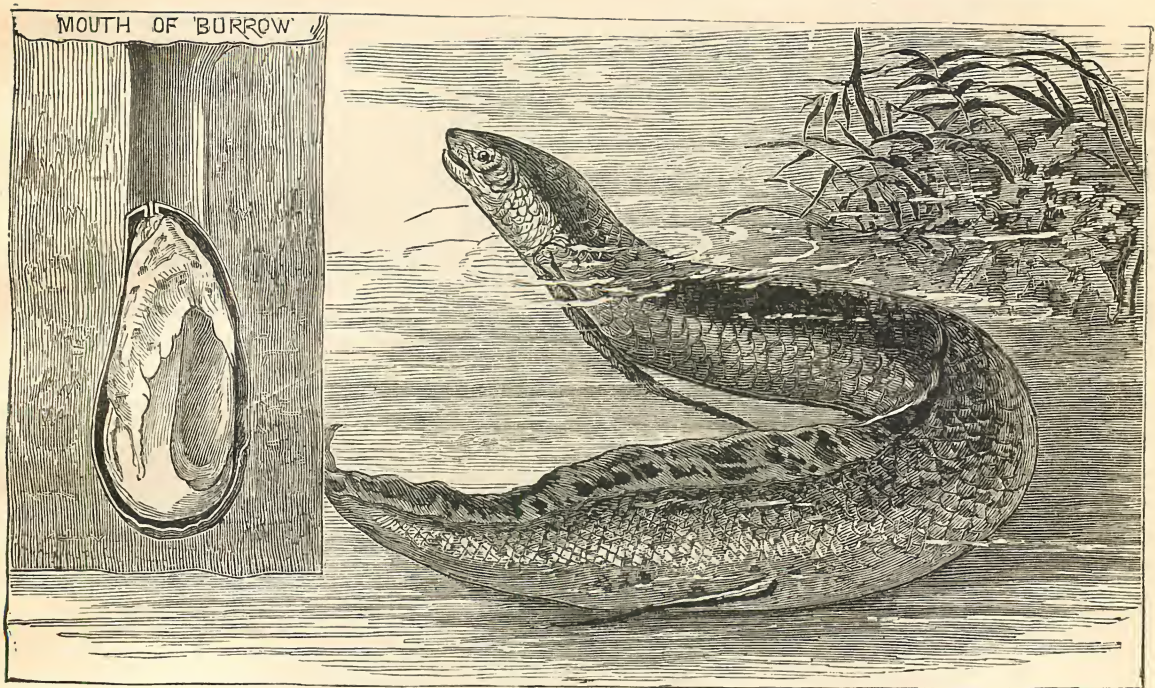
NATURE AT HOME.

III.—SUMMER SLEEPERS.

THAT quite a number of animals pass the dull, cold days of winter snugly tucked away, and sound asleep in quiet, sheltered nooks, most of us are aware; and some of the more interesting of such cases we have already discussed (see page 299).

But I suspect that few readers of *Chatterbox* know that a certain number of animals in tropical regions contrive to escape, by the doorway of sleep, from the burning heat which scorches the land, and drinks up the water over thousands of square miles, during what is known as the dry season. For day after day, at such times, the heat is awful. The birds and the fruit-bats drop dead from the trees at mid-day; and even the monkeys find no shade, and die one by one. But while some bear it as best they may, others, as we have said, escape by sleep. The number of animals which have adopted this method of escape is, however, few.

The most remarkable case is that of the curious African fish, known as the Protopterus or mud-fish. This creature has a long, almost eel-like body, and very curious fins, which look like long flexible rods rather than fins. As the rivers get lower and lower, this fish knows that the time is at hand when the last drop of water will have disappeared; and this means death, unless some way of escape is devised. Accordingly, it burrows down deep into the mud at the bottom of the river, then curls itself up so that the tail covers the mouth, as in our picture. The skin then gives off a coat of slime to preserve the last remaining traces of moisture; and here the inevitable



The Mud-fish and its Summer Sleeping-place.

drying up is quietly awaited. Nor is it long before what was once a flowing stream is now a dry, barren ditch, baked as hard as bricks. For weeks this state of things continues, till at last the floods descend again in the form of torrents of rain, such as those who live in temperate climates can never realise. In a few hours the parched river-bed is turned to mud once more, and therewith the captive sleeper is liberated.

I once had the good fortune to liberate from such a prison one of these fishes, which had been in this living tomb for more than six months. This release was effected by sawing away most of the block of clay around the prisoner, which done, the remainder of the block was dropped into luke-warm water, when lo! in about five minutes the walls crumbled away, and out burst the fish as though nothing had happened.

The scaly crocodile, similarly, when the waters dry up, passes the time of waiting in a dreamless sleep, buried in mud. The crocodiles seem to regard this method of escape somewhat in the light of a waste of time; a case is cited by an Indian naturalist where, during a severe drought, these creatures deserted their usual haunts and made their way during the night through a town to another lake, a mile or two distant, of which they appeared to have some knowledge. The journey seems to have been an eventful one, for some fell into wells, others in their fear laid their eggs in the street, some again were found entangled in garden fences and were promptly killed.

The Iberian water-tortoise, which is found in Andalusia and Morocco, is another summer sleeper.

Here again, it is not until the last drop of water, now brackish and dirty, has vanished from the half-liquid mud that it finally drops off to sleep. But here, instead of burying itself in the mud, it hides itself away under some ledge of rock.

Some land-tortoises sleep away the hot season, just as others in the same way pass the winter. In both cases, this deep sleep serves as a means of escape from starvation, for extremes both of heat and cold tend to make food scarce, or even to stop supplies altogether.


It is a curious fact that every group of backboneed animals—fishes, frogs, reptiles, and mammals—contains some members which spend more or fewer weeks of the year in this state of torpor, *except* the birds. Time was when every one believed that the swallows, at the approach of winter, retired to bury themselves in the mud at the bottom of horse-ponds, or hid themselves in caves. To-day we know better; for, as has been shown (see pages 244 and 275), these delightful companions of our summer days leave us in the autumn for the sunny skies of Africa—and most of us, I think, wish we could go with them.

Although birds can never thus escape extremes of climate, this, as we have seen, is not true of Mammals, for bats and bears, and mice and squirrels, to mention but a few cases, are hibernate. But for animals which live in herds, long fasts are impossible, for reasons into which we need not enter here. If their food supply is threatened, as by drought, they must migrate. Only in this way can they escape the terrors of death in one of its most dreadful forms—thirst and hunger.

W. P. PYCRAFT, F.Z.S., A.L.S.

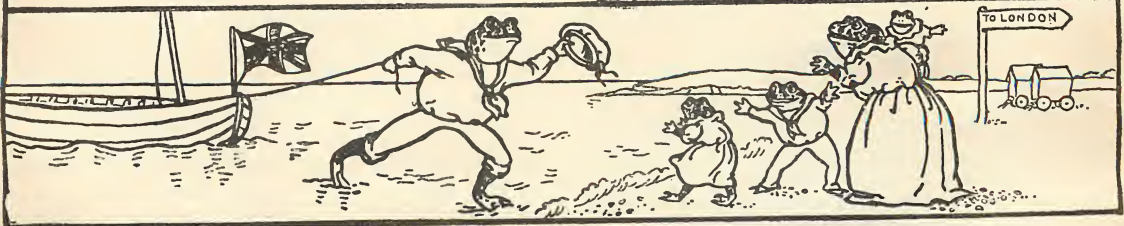
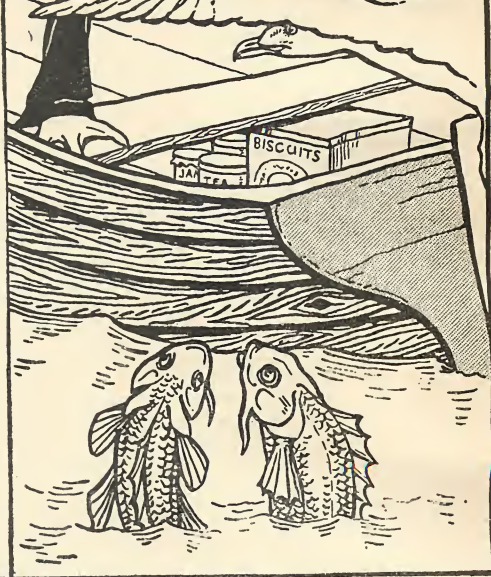


FROGGIE'S VOYAGE.

 FROG he would a-sailing go, a-sailing o'er the sea,
For South America he steered, as boldly as could be.
He wouldn't take a captain, no! nor any sailor-man;
In consequence he landed on the shores of gay Japan.

And there he stayed a little while, the wondrous land to see,
And then for Chili sailed away, 'midst breezes cool and free.
He wouldn't take a chart to guide his fragile little bark,
And therefore he was stranded on an iceberg in the dark.

Said he, 'There's surely some mistake; this seems a desert drear—
I must have steered my vessel wrong, although 'tis *chilly* here.
I'd better sail away at once, and trust to favouring gales
To carry me across the sea, and land me at Marseilles.'



So on he went, with dauntless heart, a-sailing o'er the foam,
And as he had no pilot, well—he found himself at home;

He landed at Southampton, with the Union Jack unfurled,
And boasted ever after of his voyage round the world.

LIMESTONE CASTS.

THE scenery of those districts where limestone is chiefly found is often very pretty and romantic. Limestone is a rock which usually lies in thick beds, and these form large masses for the forces of nature to work on, with the result that we get high hills, peaks, and cliffs as part of the landscape. Then, again, limestone, though it often appears so hard, is easily attacked by running water. Other rocks are mostly worn away by the friction of the water which passes over them, or by the friction of the stones and sand which are carried along by it. But ordinary water can dissolve limestone, and therefore it not only wears away this rock by friction, but it also corrodes it as an acid corrodes metal.

It is for this reason that caves extending far into the rocks are most commonly found in limestone districts, like those of Derbyshire. Water flowing under-ground has, in the course of centuries, eaten out large passages, and carried the materials away. That the water does really contain the waste of the rocks is sometimes shown to us in a very curious way. If the current is broken up by a fall, the drops which separate from the main stream are surrounded by air, and evaporate rather quickly, leaving the lime, or rather carbonate of lime, behind them. As drop after drop falls in the same place, and is evaporated, these deposits increase, until we have a pillar of stone standing up from the rock below. In the same way, water oozing from the surface of a cavern drop by drop deposits a similar pillar, which may be attached to the roof or the floor, according as the water-drops evaporate before or after they fall. The first of these kinds of pillars are called stalactites, and the second, stalagmites.

In countries where active volcanoes are found, or where earthquakes frequently occur, it often happens that springs of hot or warm water are numerous. This water seems to flow from a great depth, and it is charged with dissolved lime and other earthy substances, which are deposited round the mouths of the springs, and form white basins of hard stone. Some of these springs are reputed to be very beneficial for certain diseases, and baths are often erected near them, to which sufferers from these diseases may go to reap the advantages of the waters.

A curious industry was formerly carried on in the vicinity of three warm springs, which supply the water for the baths of San Filippo, in Tuscany. This was the manufacture of medallions, resembling carvings in marble, which were really made of the limy matters deposited by the water of the springs into suitably prepared moulds.

The water is so heavily charged with earthy matters that it deposits about a foot of solid material every year on the bottom and sides of the pond into which it falls. Much of this deposit is too rough for the manufacture of medallions, and the water was first led into a number of pits, where it deposited its heavier sediment. From these it was taken through a pipe to the top of a small room, and allowed to fall from the roof to the floor, a distance of ten or twelve feet. In order to break its fall, and scatter it in drops and sprays on all sides, a number of

crossed sticks were laid in its path. From the drops splashing and falling in all directions, a fine white sediment, closely resembling marble, was deposited on the floor and the walls of the chamber.

In order to obtain the desired casts, the workmen made a number of shallow moulds, each of which bore on its surface a hollow copy of the face of the medallion which was to be made from it—just such an impression, in fact, as would have been obtained by squeezing the medallion itself upon a surface of soft clay. The hollows of the mould were brushed over with a very thin layer of soap, and it was then placed upon the floor of the chamber, in order to be splashed upon and covered with sediment by the falling water. In course of time the hollows were filled up with the fine, hard deposit, and the mould was taken out. With a little care, the limy cast was separated from the face of the mould, the coating of soap having prevented the two adhering, as they would otherwise have done. The cast thus obtained resembled a block of carved or sculptured marble. The mould, after being soaped again, was returned to the chamber, and could be used many times. The back of it was, of course, covered with deposit from this strange shower-bath, just as the front was; but that was a matter of no importance, so long as the impression in front was protected from injury or disfigurement.

SAVED BY A HEN.

A True Anecdote.

MANY years ago the peasants in a certain part of France were bitterly persecuted, and numbers lost their lives. On one occasion many of them had to hide away, lest they should be taken and killed. One man hid in a hayloft, where no one thought of looking for him. But it so happened that none of his friends knew where he was, and he was in danger of starving even in a place of safety.

What do you think came to his aid? A barn-door fowl approached the spot where he was lying, and laid an egg close beside him.

This she did for several days in succession. And so, although he dared not go out in search of food, the life of the poor hunted man was preserved by means of the hen until all danger was past.

ROUND THE CAMP-FIRE.

IV.—THE MAN-EATER.

(Concluded from page 327.)

THAT evening Billings, in spite of the fact that he had cut a poor figure as a performer with the shot-gun, regaled us with further stories of his prowess among the great beasts of South Africa and other parts of the world.

Horsburgh gave him, however, at parting, something to think over during the silent hours of the night. 'By-the-bye, Billings,' he said, as the latter, candle in hand, was about to go to his room, 'don't attach too much importance to it, because, after all, it's only a rumour; but a native came in this evening with news that our friend, Bagh-Mahameerut, or some other huge tiger, has been seen in the

neighbourhood. I have sent a shikari to inquire into the truth of the report. If there is any chance of a shot at the brute to-morrow, we are all agreed that you are the one to occupy the place of honour.'

Billings had caught hold of the edge of the table, and the candlestick—I plainly saw it—shook in his left hand. 'Oh, no,' he said, 'I really couldn't think of allowing you all—'

'Oh, we are quite determined about it—aren't we, Bates? You want copy for the big book. Of course there may be some danger, but you won't mind that.'

'It isn't that, of course,' murmured Billings. 'The greater the danger in these matters, the more I seem to rise to the occasion. Well, thank you very much. Let's all hope the report may be true!'

'He won't sleep to-night,' said Horsburgh, as the mighty hunter departed to bed.

On the following morning, we had scarcely been out after our snipe, and other small game, for half an hour, when the shikari, Pondo, sent by Horsburgh to 'inquire' into the report of Bagh's presence in the district, came scudding up to us, according to orders carefully impressed upon him beforehand.

'Bagh-Mahameerut!' he cried. 'We have located him! The beaters are placed—all is ready—the bullock-carts are ready for the sahibs; they must drive but one league.'

I glanced at Billings; his face was as white as milk. He had been very silent this morning, and it was obvious that Horsburgh's grim prophecy that he would not sleep had been pretty nearly fulfilled.

Half an hour later we were all placed in trees at a distance of a quarter of a mile from one another—all but Bates, who could not be found. He had gone, Pondo informed us, with the shikari, Dekka, to a village where there were many quail.

'We can't wait for him,' said Horsburgh.

'He shouldn't have gone so far,' murmured Swinburne.

We received exact news of what happened at Billings' tree from Pondo later on. His story, translated into more fluent English, was something to this effect:—

The sahib was much excited while waiting for the tiger. He asked many questions: 'Did the tiger climb well, as well as a monkey?' 'Better,' I told him. 'It would be well,' I said, 'supposing Bagh-Mahameerut should come near, that his majesty did not see us among the branches, for with one leap he would be upon us, and our spirits would quickly leave our bodies.' 'We had better go higher, Pondo,' said the sahib. And we climbed almost to the top of the tree, and so we waited. When half an hour had passed, I touched the sahib's arm, and pointed to a place in the long grass. 'Does the sahib see how the grass moves?' I whispered. 'Something that is very large creeps through it towards us.' 'Where, where?' asked the sahib, seizing my shoulder very tightly. The sahib's face was like the froth of milk. I pointed to the place. 'It is either my lord the Bagh himself, or a very great leopard,' I said. 'Shoot, sahib!' Even as I spoke there came a sound from the place where the grass moved, such a sound as never yet was heard by the ears of man, and at the same moment an awful head, with open mouth and

staring eyes, raised itself from the grass, and gazed for a moment at us.

'Shoot, sahib, if you value life!' I cried. 'It is the Maha-Bagh himself. Shoot two times!'

Then the sahib tried to raise the rifle, but his arm refused to respond to his desire, for the sahib was afraid. I helped him, and presently, with shaking hands, he fired once and twice. Again came that terrible sound, and a second time appeared that dreadful head. The sahib was now trying to climb still higher up the tree, having dropped his rifle, but I restrained him. 'See, sahib,' I cried, 'you have wounded the beast—he is making off. If you had missed him he would even now be rushing up the trunk of the tree.'

The sahib gazed with affrighted eyes. It was true that the tiger departed. Another moment and he quite disappeared. I descended and examined the place in which we had seen the dreadful beast, and, behold, there was much blood. When the sahib at last came down from the tree he rejoiced to see the blood. 'He will die, Pondo,' said the sahib, 'for with the rifle my aim is unerring. Let us summon the other sahibs by shouting, and tell them what I have done.' Then came the most merciful and generous Sahib Horsburgh, and the other sahibs.

Mr. Billings was great that evening and for several days, until his departure for Ajmere, which departure he delayed, in hopes that men who had followed the wounded tiger would meanwhile discover his remains and bring back the skin and head. His version of Bagh's arrival and of his own conduct differed much from that of the shikari, and he gave us many new tales of his prowess in various parts of the world. He departed early in the morning, and Horsburgh, upon seeing him off, presented him with a packing-case.

'You will be glad to have this,' he told him. 'In it is the tiger's head. There was no skin worth having, but the head is safely packed in this box for you.'

'I wonder what he will think when he opens it,' Horsburgh drawled, as the trap containing Mr. Billings disappeared in a cloud of dust. 'The awkward part of it is that there's a silver plate let into the wooden end of his neck, inscribed, "Shot by T. Horsburgh," and the date, which is five years ago.'

As a matter of fact, we never learned what Mr. Billings thought. That he recognised some mistake had occurred was proved by the circumstance that the stuffed tiger's head was returned without comment a few days later. Perhaps we shall know more when the great work, *The Truth about India*, appears; but there is as yet no sign of the book, though the great hunt of Bagh-Mahameerut-Bates took place eleven years ago!

As a matter of fact, I fancy (Ralph ended) that even when the work does appear, if ever it should, we shall search in vain for any reference to these events. Perhaps Mr. Billings' visit to Jampore will not be thought worthy of mention! Perhaps, also, he suspected that the great Bagh at whom he had fired blank cartridge (for Pondo had had instructions about loading his rifle) from the tree had been but a made-up animal, consisting of a stuffed head, a bottle of claret, a cardboard megaphone and—young Mr. Bates!



“‘Shoot, shoot, if you value life!’”



“ ‘Just like a man.’ ”

HIS FIRST SHAVE.

'WILL you take this note up to your uncle, Edwin? He is in his dressing-room. Tell him the man is waiting for an answer.'

'Yes, Auntie,' said Edwin, as he took the note and ran quickly upstairs.

There an amazing sight met his eye. Edwin, it must be explained, was on a visit to his uncle and aunt, and being a fatherless boy, who had hitherto lived alone with his mother in a little country cottage, he had never before, though twelve years of age, seen a man in the act of shaving!

The sight fascinated him, and, to his intense delight, his uncle did not at once read the note, but said, 'Just wait a minute, my lad—I can't read anything till I have done shaving. You sit there for two minutes, and then I will give you a message. It's only that old rascal, Hughes—I know his fist.'

As he spoke he was rapidly lathering his cheeks and chin, and then he took up the razor, Edwin following every movement with much interest.

'It's quite easy,' said the boy to himself. 'I must have a try some day. It is only right I should know how to do things that I shall have to do when I am a man.'

This last sentence was to quiet his conscience, which would keep telling him that shaving—at any rate with *other people's things*—was not right for boys; but Edwin chose to pay no heed to this reminder, and bided his time for a shave of his own.

The time came sooner than he had dared to hope. Directly after lunch, that very day, his uncle had to go into the town; his aunt always had a nap on the dining-room sofa, and the maid was busy washing up. So the coast upstairs was quite clear, and Edwin crept softly into his uncle's dressing-room to begin the great feat.

'I must take off my coat and roll up my shirt-sleeves,' he said. 'Aunt would soon find me out if I got my jacket all over lather, and I mean to make a jolly good lather all over my face. So here goes!'

He rapidly pulled off his jacket and collar, unbuttoned his shirt and turned it well in at the neck—then he rolled back his shirt-sleeves, and hastily threw a big bath-towel over his left shoulder.

'Now I'm ready! Here's the brush and here's the little box of shaving soap. How good it smells! Where's the water? Oh!'—in some dismay—'I do believe Uncle had hot water. I remember seeing it steam. . . . Never mind! I will manage with cold: it doesn't do to be too fanciful.'

To his relief the soap seemed to lather almost as well with cold water as with hot, and Edwin stood before the glass in a perfect ecstasy of delight as he saw his rosy cheeks and round chin fairly smothered in flakes of sweet-smelling lather.

'It makes me look just like a man,' he thought as a smile of enjoyment spread over his face, 'an old man—with white beard and whiskers,' and he dabbed the brush again on the cheek to increase the whisker effect. 'And now,' he went on, 'for the best fun of all—the razor business!'

He took the razor from its case on the dressing-table, and went closer to the looking-glass. 'It's very

sharp,' he said. 'I must mind I do not cut my nose off!'

Just as he said this, he caught sight of his uncle through the window, walking up the path to the house. 'Oh, what shall I do? He will find me here!' said Edwin in dismay, and in his confusion he dropped the open razor, and it fell full upon his left wrist.

The next moment a cut appeared in a way that terrified the poor boy. Hardly knowing what he did, he ran wildly from the room, almost knocking down his uncle who was coming upstairs.

'I have cut myself!' said Edwin; but no words were needed, for his wrist told its own tale.

In less than a minute his uncle had formed a rough tourniquet round the boy's wrist; that done he brushed the lather from his face, and then hurried him off to the doctor, who stitched up the long cut and made Edwin fairly comfortable, though he was weak from fright and loss of blood.

'And now I think I can guess how it all happened,' said his uncle, but in such a kind voice that Edwin could not be afraid; and he spoke up and told him the whole truth, and ended up with, 'Don't be angry with me, Uncle. I won't do it again.'

'Angry!' laughed his uncle. 'No, my lad: a bit of boyish folly like that will not make me angry! I am only sorry you should have been punished so severely, for it will be three weeks or more before you can have the proper use of your hand. However, it might have been far worse, and if it teaches you the useful lesson to "beware of edged tools," especially other people's tools'—and here Uncle gave a sly look at Edwin, who turned very red—'you will have learned something which will be of service to you all your life, and you may perhaps not regret the misadventure of your first shave!'

E. A. B.

FEATHERED FRIENDS THAT STAY.

II.—THE TREE-CREEPER.

SOMETIMES, when sitting under some shady tree in the garden, or when wandering through a wood, we hear a sharp, clear note, something like 'cheet, cheet.' If we stand still very quietly, and peer upwards through the branches, when our eyes become used to the dim light falling on the trunk, we may see a tiny moving thing which, as seen from below, is dark above and soft silky white underneath. It is smaller than a sparrow, much more slender in form, and clings closely to the tree, running up the bark with a smooth, gliding motion more like that of a feathered mouse than of a bird. This is a Tree-creeper, and I said 'running up' because it is not tree-creeper fashion to run down; but when as high as it is pleased to go, it opens its wings and flits downwards to some lower tree, or branch of the one which it climbed up. Its flight is undulating or wavy in motion, and, as might be expected in a bird which uses its wings very little, is rather slow. But if leisurely in flying, the tree-creeper is unusually quick and lively in other movements, and it is most amusing to watch the activity and energy with which the little creature hunts its prey.

The Tree-creeper is provided with a long, slender

bill, and with this it searches cracks and crannies of the bark for insects of all kinds, although spiders are the luxury which it likes best.

In the winter it often drags from its cunningly chosen hiding-place a cocoon web with an appetising enclosure, a chrysalis or a bunch of larvæ, which supply it with a scanty but welcome meal. Sometimes, when the sunshine is bright, it will catch sight of a wandering fly, and in an instant the creeping creature is an active bird darting amongst the branches to seize and swallow its victim, returning at once to what it was doing before.

Tree-creepers have wonderfully strong feet, furnished with round, sharp claws, which enable them to cling closely to trees, and also to tear off the little strips of bark which figure so largely in their nests. They have also curiously stiff tails, which are used as props to prevent their falling when standing still to search out some hopeful crevice; and if you see one near enough, you will notice that this tail is bright red-brown in colour, and that the dark wings are striped with yellowish bands, whilst the eyes are wonderfully bright.

Creepers are not gregarious or sociable birds travelling in parties, but Mr. and Mrs. Tree-creeper keep together, and in solitude enjoy each other's society. In winter, however, when food is scarce, they sometimes join flocks of Titmice or Golden-crested Wrens, who journey from place to place in search of something to live upon.

Creepers make very snug nests of twigs, roots, grasses, moss, and feathers; but the peculiarity of a creeper's nest is the use of fine inside bark. The nest is carefully placed either in a hole in a tree or where branches join the trunk, so that it is well concealed. The eggs are white with brown-red spots, and the industrious little birds raise two broods a year. Mrs. Tree-creeper sits very closely on her eggs, and Mr. Tree-creeper, like a model husband, feeds her most affectionately all the time that she is so engaged.

There are several varieties of the creepers, of which perhaps the best known is the Brown Creeper of America; strange to say, the beautiful Lyre-bird of Australia, with its magnificent plumage, belongs to the same species, curiously contrasting with the usual homely and sober feathering of the rest of the Creeper family.

HELENA HEATH.

THE MAGIC CANDLE.

THERE was once a great nobleman—his name was the Comte de Louppy—who had a country house, at which he was accustomed to stay for some time each year.

One of the Comte's most welcome guests was his cousin, the Duc de Beaulieu, a very able man, who had been an ambassador.

The two cousins were firm friends, and the weeks which year by year they spent together were the pleasantest in their lives.

One autumn evening, when, after a day's sport, they were sitting down to dinner, the Comte told his cousin that he had lost his purse, which he usually kept in the inner pocket of his coat.

'What can have become of it?' he said.

'Did you drop it out-of-doors?' asked his cousin.

'I am sure that I did not. I had it when we entered the house.'

'You may have left it in your shooting-jacket.'

'No. I remember placing it upon the mantel-piece in my room.'

'How much had you in the purse?'

'Only a small sum. That does not matter. It is the purse itself that I care about. It was embroidered especially for me by my dear sister, Annette, who has long since passed away. It is my only souvenir of her, so that you will understand how much I prize it.'

'You have looked on the mantel-piece, of course?'

'I looked there first of all, because I knew that I had placed it there. When I failed to find it, I supposed that I had absent-mindedly replaced it in my pocket.'

'Are you sure of your servants?'

'Absolutely sure of my valet, Bourgogne, but I would not answer for the others. It seems as if the purse must have been stolen—but by whom? Not by Bourgogne, I feel certain! He has been with me for a long time, and I have every confidence in him. Some one must have entered my room when I left it, and taken the purse from the mantel-piece. You would not believe, my dear fellow, how annoyed I am by this incident.'

'Well, let us question the servants. Give orders that they are to assemble in one room. I know of a means to discover the culprit—a method which I saw employed at the Court of Naples during my last mission. You will see! Let me manage *this* affair for you.'

All the servants were gathered together in the vestibule, at the foot of the grand staircase. The Comte de Louppy and the Duc de Beaulieu stood above the others on one of the lower stairs, while the latter explained in a few words the occasion of this meeting.

'We have absolute proof,' he said, 'that a theft has been committed. We suspect no special person, we accuse no one, but'—and he held up a candle—'*this* will tell us who is the thief. Here is a candle said to be composed of a peculiar *kind* of wax, containing mysterious, magical properties; it is said that when lighted, it cannot be blown out by any other person than the thief who has taken the missing article. You will come, one at a time, into the dining-room, and there, in the presence of your master and myself, will submit yourselves to the test.'

People in those days (for this happened a long time ago) were very ignorant, and the servants believed every word of this speech.

The ordeal began. The first person to enter the dining-room was the valet, Bourgogne. Conscious of his innocence, the honest fellow blew with all his might, and—put out the flame!

Bourgogne was frightened. 'Indeed, I am not guilty!' he cried.

'We know that, my friend,' said the duke kindly. 'Do not alarm yourself! Only we do not want anything said about what goes on in here. Just go into that room on the right, and remain there until we have finished this business.'



“Blow harder! If you are innocent, you have nothing to fear.”

When Bourgogne had gone, the duke re-lighted the candle, and called in another man. This one also blew strongly upon the flame, and, to his dismay, blew it out. He was reassured and sent to keep

Bourgogne company. The same thing happened again and again, until seven of the servants had blown out the candle. At last came one who had been in the service of the Comte de Louppy only eight days.

This man puffed at the candle so gently and crookedly that the flame scarcely trembled.

'Blow harder, man!' said the Duc de Beaulieu. 'If you are innocent, you have nothing to fear.'

But the servant, who had a guilty conscience, puffed as lightly as possible.

'We need go no further,' said the duke. 'You are the thief.'

'Yes, my lord,' stammered the culprit. Putting his hand into his pocket, he brought out the missing purse.

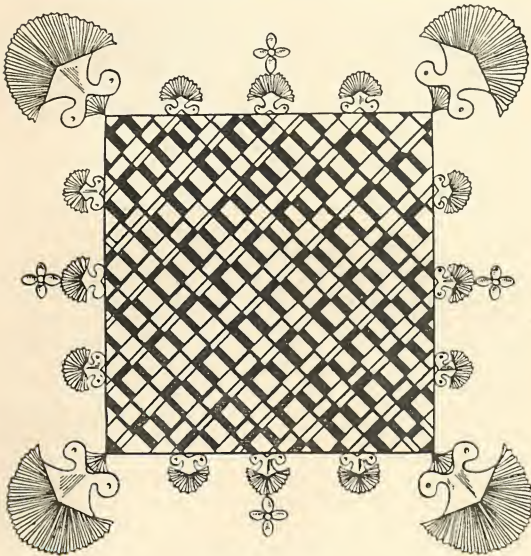
'We will not expose you,' said the Comte de Louppy. 'Your confession shall be known only to the duke and myself; but to-morrow you will take yourself out of my house, to come to a bad end, unless you mend your ways, elsewhere!'

DOORS, LOCKS, AND KEYS.

IV.—GRILLES AND KNOCKERS.

IN certain doors the 'grille' plays an essential part, especially in prison arrangements; indeed, anywhere where it is desirable to hold conversation with visitors or to inspect them before admission.

In prisons the grille is a mere lattice-work of iron bars let into the door, but in many ancient fortress palaces great skill has been shown in making the ironwork graceful in design and of perfect execution.

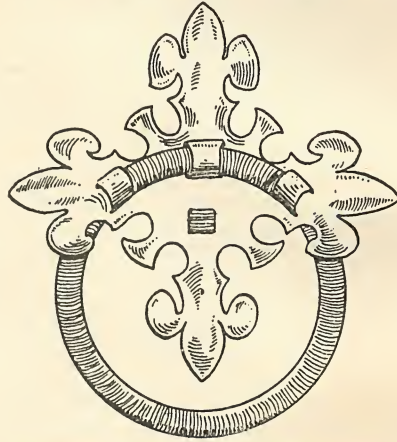


Grille at Bruges.

No mere filing work was admissible, but bars and ornamentalations have been hammered and wrought with infinite care, and the results are often exceedingly beautiful. The specimen given is from a building at Bruges, in Belgium, and the shell-pattern is carried out in the border with great delicacy.

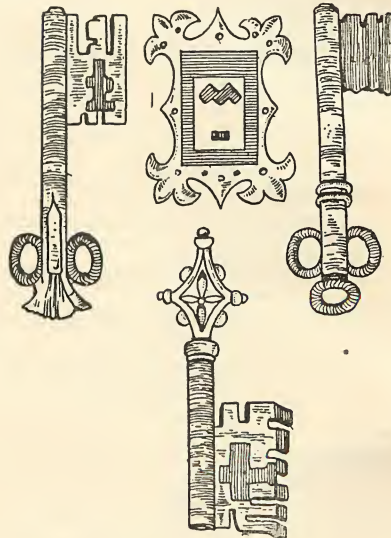
In ancient times, when the right of 'Sanctuary' could be claimed, by which criminals taking refuge in certain consecrated buildings were protected, for at

least a certain time, both from private foes and from the power of the civil law, knockers were important factors in the protection of the hunted person. Various cathedrals and abbeys had each its 'sanctuary door,' with a knocker, and some of these still



Knocker on Door of Portishead Church.

survive; it is not difficult to imagine the eagerness with which a criminal, guilty or not guilty, would listen for the steps which brought his safety nearer and nearer, whilst his pursuers might be only a few



Ancient Keys and Lock. Escutcheon of Dover Castle.

yards away. Life or death might hang on the deep tone of that knocker: inside, safety; outside, despair and perhaps death.

The knocker in the drawing is taken from the parish church of Portishead, near Bristol, and there is a somewhat similar one on the Church of St.

Nicholas, in Gloucester. Durham Cathedral has a fine specimen, and the fire and indignation expressed in the metal-face guarding the knocker ought almost in itself have sufficed to keep man-hunters at a distance. It has its place on the door of the Galilee porch, and night and day its summons was at once obeyed. Immediately that the fugitive had entered, the Galilee bell was tolled, to let pursuers and the surrounding population know that a fugitive had been afforded asylum. Then the new-comer was attired in a black robe with a yellow cross on the shoulder, and he was made welcome to bed and board, although he was not allowed the use of a knife or any cutting instrument.

Sometimes he could prove his innocence, sometimes he obtained a free pardon, and more often he was allowed to leave the country and go beyond seas within a limited period; but, in any case, summary vengeance was postponed, a plan which, in times when might was right and the weak had little protection against the strong, saved many a life.

The ancient keys of Dover Castle and the cover of a lock from the same, are interesting from their own curious workmanship, but even more so from their connection with one of the oldest fortresses in Britain. Chroniclers tell us that when Arviragus, a British king, refused to pay tribute to the Romans, he proceeded to fortify Dover Castle with walls and ditches. Clearly his resistance was not very effective, as Dover became a Roman fortress, of which fragments still remain, built of the long, flat bricks peculiar to the all-conquering nation, and of tiles curiously wrought with knobs and ledges, enabling them to be easily attached one to another.

THE BUTTERCUP'S DREAM.

THE meadows were yet without blossom, the ways were all wintry and cold,
When the buttercup had a sweet dream in her home so deep down it the mould:
She dreamt that the winter was over, that the summer had come back again,
That the sunbeams all danced on the streamlet, and played hide-and-seek in the lane.
The birds in the forest were nesting, the trees were all covered with green,
And the cowslip and primrose and daisy in their beautiful raiment were seen.
The skylark was mounting far skyward o'er the cornfield where red poppies grew,
And, although it was yet early morning, was far on its way to the blue.
Then the buttercup gave a slight shiver and opened her eyelids once more,
But alas! it was still the mid-winter and the ground was all covered with hoar.
The trees stood all barren and leafless, and showed not a sign of a nest,
And though noontide was only just over, the sun would soon go to the west.
'Ah, me! why, I must have been dreaming that summer, sweet summer, was here,
And the winter is not nearly over; it is dark and so lonely down here;

I will close up my eyes just once more, and when later I wake up again,
Perhaps winter will really be ended, and the frost and the cold and the rain.'

So she turned once again to her slumbers, and slept for a very long while,
And the dark passed away, and the cold, and she opened her eyes with a smile;
And, oh, what a sweet transformation! the long-delayed summer had come,
And the buttercup woke to the sunshine and the green of her sweet meadow-home.

Yes! there was the note of the lark, sweet and clear as she heard in her dream,
And the sunbeams were all gaily dancing and lighting each thing with their gleam;
And the skies where the bright sun was shining were full of a wonderful blue,
For the winter was really quite over—the buttercup's dream had come true.

THE FIRST STEAMBOAT.

EVERYBODY has heard or read of Fulton, the American, who had the credit of making the first effective steamboat. But before him, in the reign of Charles I., the Marquis of Worcester discovered the powers of steam—for which people called him mad. His invention was never followed up; wars and troubles, with suspicions of the new discovery, put an end to experiments for a long time.

Before these two, however, lived another inventor, whose history is told in the records of Spain. In the sixteenth century, a Spaniard, named Garay, surprised the world by offering to exhibit a machine which would propel a vessel without oars or sails. The Spaniards laughed at him, but Garay persisted in bringing his discovery before the government, and made an appeal to the Emperor Charles V., asking him to be present when his invention was exhibited to the public. The Emperor did not agree to this, but he told Garay, as he could not attend himself, he would appoint a committee of gentlemen who should come to Barcelona, see the machine working, and give him their report. So, with hopeful heart, Garay got his ship ready, and he called it *La Trinidad*: it was of two hundred tons burden.

On the 17th of June, 1543, the committee arrived, and all the people of Barcelona, who could do so, turned out to witness the experiment. Garay gave the signal, and the ship moved rapidly backwards and forwards at the will of the steersman. The moving power was seen to be a number of paddles; inside the ship they saw a huge caldron of boiling water, also many wheels, large and small. The Emperor was told what Garay had done, and as a reward he gave the inventor fifty thousand crowns from the royal treasury and a title of honour. But the committee told the Emperor that, though the experiment was successful, they thought Garay's invention would be of no good to the world. The machine would be always getting out of repair, they said, and the ship would go very slowly if loaded, and if the boiler burst, how dreadful that would be! As poor Garay had no encouragement, nothing more was done.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 338.)

CHAPTER XXIX.—THE ENGINES AND THE HURRICANE.

IT took five or six hours to get everything ready for a start, and during that time a change had come over the day. There was not a cloud in the sky, yet the brilliancy of the day had sensibly diminished. There was a misty look about the sun, and the sea-line had become vague. Mr. Graham, who had been down to look at the glass, seemed irritable and anxious.

'Sawyer!' he called out. 'Go down to the engine-room and tell them to do an overhaul of the machinery, and to be sure the lubrications are all right, for we don't want any heated bearings.' Then, calling over the side to the destroyer, 'Hurry up, there! The weather is changing; the glass has dropped an inch, and there's something coming along. Ahoy, there, Greg! When the boat goes back, get down to Teneriffe harbour as hard as you can pelt.'

'Ay, ay, sir!' said Greg.

'There's a gale in the sun,' said the lieutenant, turning to O'Brien, 'and I want the destroyer housed in Teneriffe harbour as quick as can be, for she's under-manned now that she has had to part with some of her stokers to us. Hurry up, there! hurry up, there!' he cried again to Greg, who was getting the boat away as fast as mortal could.

Then Mr. Graham went on, addressing O'Brien, 'Sub-lieutenant Ferguson is with Greg; he has got a bad foot, or he would have been in this job, but he can navigate her down to Teneriffe all right. Ah, here are the men—that's right. I'm going on the bridge. Sing out when the boat's away again.'

'What are we to do with the boat we took from Gommera, sir?' asked O'Brien. 'They have streamed her astern on a line.'

'Cut her away,' replied the lieutenant. 'She's no good, and she belongs to the island. Let the tub find her way back if she can.'

He stalked up the bridge-steps and took his place near the steersman.

'Boat's away, sir!' cried Teddy at last.

The engine-room telegraph-bell rang, and the ship began to move in a half-circle, setting her nose due south for Teneriffe.

They had not made a mile when the destroyer, obeying orders, stormed past them, bound for the same port. The black smoke was pouring from her funnels; she was flinging a long ribbon of water over her bow-plates as a carpenter's plane flings shavings over its 'shoulder'; Greg and Ferguson were not the men to dawdle once they had got a free hand as to speed, and she was making a good thirty knots. She passed the *Kingfisher* as though the latter were stationary.

Mr. Graham tramped the bridge. His eyes were fixed on the southern horizon, where a hard black line had appeared, as if some mysterious land had heaved itself out of the water. The sun had become a sickly yellow disk, and there was a clammy heat in the air, and an odd shuddering heave in the sea.

Wingrove, an old navy quartermaster, was at the wheel, and as he spun the spokes he cocked his eye now and then at the sun in a way that spoke volumes.

'Why, what's this?' said the lieutenant, shading his eyes suddenly and gazing ahead.

A small vessel in the distance was approaching dead-on; it was a torpedo-boat apparently.

Mr. Graham examined her through his glass.

'It's a Spanish torpedo-boat; I can see the flag. I know what it is: the authorities have sent her from Las Palmas or Teneriffe to search after the *Kingfisher*, and now they will want to make inquiries and delay us, and there's a thundering gale coming up if I know anything about the weather.'

He was right in every particular. An old-fashioned type of torpedo-boat of the sort that makes more smoke than speed hove herself leisurely out of the sea.

She fired a gun as she approached, and the lieutenant turned the handle of the engine-room telegraph to dead slow.

In a minute torpedo-boat and cable-ship were side by side, a cable-length or two apart.

'Ship there!' came the voice of a Spanish officer from the torpedo-boat.

'Ahoy!' cried the lieutenant.

'Cease your engines; I wish come aboard.'

'The ship's under an English navy crew. We have caught the mutineers; we are making for Teneriffe harbour,' shouted the lieutenant through a megaphone made by the invaluable Sawyer.

'Ship there!' came the voice.

'Ahoy! ahoy!'

'Cease your engines, or I fire gun into you.'

'Idiot!' cried Mr. Graham, ringing the engines off.

The two vessels lay rocking side by side. A boat was put out from the torpedo-boat, and a rope ladder lowered over the *Kingfisher's* side, the boat-steps and grating having been drawn up.

In a minute or two a tanned Spanish officer came up the ladder and cocked his leg over the bulwarks.

'This the *Kingfisher*?' asked he, dropping on deck and saluting Mr. Graham, who had come down from the bridge.

'Yes; this is the *Kingfisher* cable-boat. I am Lieutenant Graham, of the Atlantic fleet, told off by my admiral to take her into harbour. We have secured the crew that mutinied, and have some of them below. O'Brien, there, you speak Spanish: translate, will you?'

O'Brien translated.

'He wishes to offer you his compliments, sir,' said O'Brien when he had finished and the Spaniard had replied. 'He is sorry to have caused you to stop, but the cable-hands and our captain have landed at Teneriffe and given information of the mutiny, and his orders were to stop the ship and board her. He wants to see the prisoners—says it is only his duty.'

'Well, take him below!' fumed the lieutenant, glancing at the horizon southward, where a wall of cloud lay now like a rampart built of solid steel.

(Continued on page 354.)



“ ‘This the *Kingfishair*?’ asked he, saluting Mr. Graham.”



A Cavalier of the time of Louis XIII. By Meissonier.

PICTURES AND THEIR PAINTERS.

From the Wallace Collection, London.

VII.—MEISSONIER.

OUR present picture—a cavalier of the time of Louis XIII.—brings us up to our own times, for it is not twenty years since Meissonier, the great French painter, was still amongst us. Our own country is rich in his pictures, and many of them are familiar to every one from photographs and engravings.

Jean Louis Ernest Meissonier was born in 1815 in the city of Lyons, where his father was a shopkeeper. The family removed to Paris while he was still a child, and the boy, after a short career as apprentice to a druggist, won his father's permission to devote himself to art. The lad was constantly to be found among the treasures in the galleries of the Louvre, studying especially the works of the great Dutch masters. Here he learnt that careful and minute attention to detail which is the distinguishing mark of his painting. 'More complete than any Dutchman' is the description that has been given of him, and in the patient, elaborate study of still-life we are often reminded of the great masters of Holland and Flanders. To understand really how Meissonier's work was done, we ought to see the sketches made for his great pictures, showing how carefully and patiently he studied every detail of costume, furniture, or landscape that went to make up the finished composition. A story told about his paintings of the first Emperor Napoleon illustrates this characteristic. He borrowed from the Museum the coat of the great Buonaparte, the famous *redingote grise* which gave a nickname to the Emperor. Meissonier had a facsimile made of this historic garment, every stain and sign of wear being faithfully reproduced. Then, putting it on himself, he mounted a wooden horse, and sat for hours before a mirror, studying his own reflection, until every line and crease in the famous coat became familiar to him. It is interesting to think of this thorough painstaking work as we look at the great picture known as '1814'—the Emperor, with the gloom of failure on his face, riding, stern and lonely, at the head of his staff as he retreats before the allied army over the dreary waste of trodden snow.

Still, this devotion to detail has its dangers, leading an artist sometimes to miss the broad general effect he desires to produce. It has been well remarked of one of Meissonier's pictures that, when a squadron of cavalry sweeps by you at the gallop, you do not see every point in their accoutrements, and to lay too much stress upon these is apt to take off from the swing and rush of the charge. It is for this reason that some of Meissonier's most successful pictures are those which are merely studies, showing types of character rather than incidents. Such is the picture from the Wallace collection shown in our illustration, a haughty, gallant cavalier of the period of Louis XIII. on his way, perhaps, to the *levée* of the king. How carefully the artist has depicted his brave array, the slashed sleeves, the silken sash, the costly lace upon his collar, one glove dangling in his fingers—a suggestion, perhaps, of how lightly that same glove would be flung down at a

chance word, and how ready the long, slender blade at his side would be to uphold its owner's quarrel!

Meissonier is never more at home than among fighting men. One of his best-known pictures is that called 'La Rixe' (The Quarrel), two hot-headed soldiers of fortune held back by their comrades from a duel which would assuredly be fought to the death could they come to close quarters in their present state of mind. A pleasant story is told about the manner in which this picture became an English possession. In the year 1855, Queen Victoria and Prince Albert were on a visit to the court of the Emperor Napoleon III. Meissonier's picture was one of the gems of the Salon exhibition of that year, and Prince Albert, who was no mean critic, was greatly struck by it, and spoke warmly to his imperial host of the French painter's talent. On the following day the picture arrived at the Elysée, where the Prince was staying, as a gift from the Emperor to his guest, and it hangs now at Buckingham Palace, a pleasant reminder of the cordiality that existed in those days between the sovereigns of England and France.

In the fatal year 1870, Meissonier was invited by his friend and patron, Napoleon III., to accompany him upon the German campaign, and study real warfare on the battle-field. A very terrible study it must have been for the French artist, who, after the disaster of Sedan and the surrender of the French army, returned to Paris, and did his part in the life and death struggle of that winter as colonel of a marching regiment. After that grievous experience his latter days were peaceful and honoured, his genius being generally recognised, and his pictures commanding large prices. In his last years he spent much time at his country house at Poissy, where the venerable figure, with his long beard and wide-brimmed hat, busy over his careful, conscientious work, was a familiar sight to the village folk.

MARY H. DEBENHAM.

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 351.)

O'BRIEN took the Spaniard down to the cable-deck, and in four or five minutes they returned, the Spaniard talking rapidly.

'He says his ship will escort us to Teneriffe, sir,' said O'Brien with a grin. 'He says we are now under his escort, and we are to follow him.'

'Tell him to take his old coffee-pot out of my way,' thundered Mr. Graham. 'He wants to get the credit for the job, does he? Tell him to get off the ship: there's an Old Bob Ridley of a storm coming up, and he has delayed us nearly half an hour already with his fuss.'

Teddy translated as faithfully as he could, and the effect was not soothing. The Spaniard got over the side and down the ladder like an enraged monkey.

'He says he will report us, sir,' said O'Brien.

It is needless to give Mr. Graham's reply. He hurried up to the bridge again. 'Half-speed ahead, full speed ahead,' went the telegraph bell; and the *Kingfisher* resumed her course.

But the Spanish boat had a bit the advantage in speed, and she kept in a most annoying manner right ahead, fulfilling her officious duty as 'escort.'

'Leave her alone,' said the lieutenant; 'you will see her poop-under in half an hour, if I'm not mistaken.'

The hard, solid wall of cloud down south had suddenly broken, spirals of smoke seemed rising from it; a scud was flying through the higher sky, and the breeze had suddenly turned cold and sharp. Every minute the sky seemed to change, but with one constant effect—the light seemed dying out of the world. One might have thought it the beginning of a total eclipse.

Mr. Graham gave orders for every hatch to be closed forward, and everything to be made snug aloft. They were now three or four miles from Gommera, and the lieutenant wished himself five hundred; for he was on a strange ship, and did not know the reliability of its engines; and the thought of that awful coast on the lee was a nightmare.

'It's coming on us quick, sir,' said Wingrove.

'Ay, it is!' replied the lieutenant, glancing up at the rushing clouds that now overspread the sky, and then at the solid wall of darkness right ahead. 'Hark!'

A droning sound filled the air. It was exactly the sound of a great humming-top spun on a bare floor. The torpedo-boat in front of them suddenly vanished, swallowed from sight in the wall of rain and foam that came rushing across the water, and the hurricane broke on the *Kingfisher* with a crash.

So fierce was the impact that Mr. Graham was driven backwards against the stanchions of the bridge, and held there for a moment as helpless as a baby. Wingrove, at the wheel, slightly more protected, just managed to hold his own. Down in the engine-room, though you could hear the piercing yell of the storm, as it struck backstay and ratline, you could not have guessed the full ferocity of it; for the ship rode on an absolutely even keel. The weight of the wind had levelled out the sea as flat as a floor.

Mr. Arnold, the second engineer of the destroyer, had thoroughly overhauled the engines of the *Kingfisher*, and not only the engines, but the propeller-shaft as far as the thrust-block, so that when, after the first onset of the hurricane, the lieutenant's voice came down the speaking-tube from the bridge, telling him to look out for his engines, he could reply with confidence.

'I can depend on Arnold,' said the lieutenant to himself, as he clung to the bridge rails; 'and, if the engines are half as good as he, we shall pull through. Here comes the sea, Wingrove!'

A huge sea struck the *Kingfisher* full in the bow, burst into foam, and went roaring aft, washing the decks, and rushing through the scupper-holes. Another followed, and another, and now the sea around them, in the half-darkness, was no longer a level floor, but an expanse of snow-strewn mountains. Now the bow would point to the sky, and then, with an awful heave, up would go the stern; whilst the racing of the engines, as the propeller lost its grip of the water and beat the air, shook the ship from truck to keelson.

There was always the chance that, in one of these

mad whirls, the propeller-shaft would snap off like a carrot. If that happened, the ship would lose steerage-way, broach to, and go to the bottom like a broken tin-kettle.

And the worst of it was that, every time the propeller raced vainly, the ship lost way.

'If she's holding her own it's all she's doing,' shouted Mr. Graham to the helmsman.

'Ay, ay, sir,' replied Wingrove, 'and I doubt if she's doing that.'

Suddenly a flash of lightning came that lit up the ocean from horizon to horizon: lit it up as clearly as if the sun had suddenly appeared for one awful second, showing the face of the ocean as a mountainous country out of which Gommera stood black and grim, scarcely three miles to leeward.

The flash was followed by a crash of thunder, and was of such short duration that the movement of the waves could not be noted; they looked solid, and their appearance, as I have said, was that of a mountainous country strewn with snow.

'Take charge whilst I go to the engine-room,' said the lieutenant to Sawyer, who had come on the bridge; 'we cannot fight it out unless we can get some more pressure on.'

He slid down the ladder, passed the steam steering-gear house, where Marley and O'Brien had taken refuge, and then made his way aft to the engine-room hatch.

The great engines snoring over their work, dripping with oil, and glittering in the lamp-light, were like giants labouring at some herculean task; when the propeller raced, they too raced madly, seeming to try to tear themselves free from their bed-plates; at these moments, one could not hear oneself speak; then, when the propeller gripped the water again, they resumed their heavy accustomed tread, during which the hiccuping gasps of the low-pressure cylinder could be heard answering the noise of the storm outside.

'The boilers won't stand another ounce, sir,' replied the second engineer in answer to his lieutenant's demand for more steam. 'They are not so sound as they ought to be from my observations of them, but the engines are right enough.'

'It's always the way in the mercantile marine,' said the lieutenant; 'sure to be some defect somewhere stopped up with putty. Anyhow, if I want more steam suddenly and signal for it, risk it even on the chance of blowing her up; it's either that or going on the rocks, as far as I can see.'

He returned on deck. Scarcely had he emerged from the engine-room hatch into the raging storm than the whole ocean was lit by another flash of lightning, and Gommera stood up out of the raving ocean, black and terrible and closer than before.

There could be no doubt. Fight as hard as the engines could, the storm was driving the ship back little by little, foot by foot, or rather fathom by fathom, on to the iron-bound coast of the island.

The lieutenant, as he struggled forward clinging to every support and half blinded by spray and wind, recognised that if some miracle did not happen, they were doomed. It was only a question of time. The only hope was that the storm might suddenly abate or change its course.



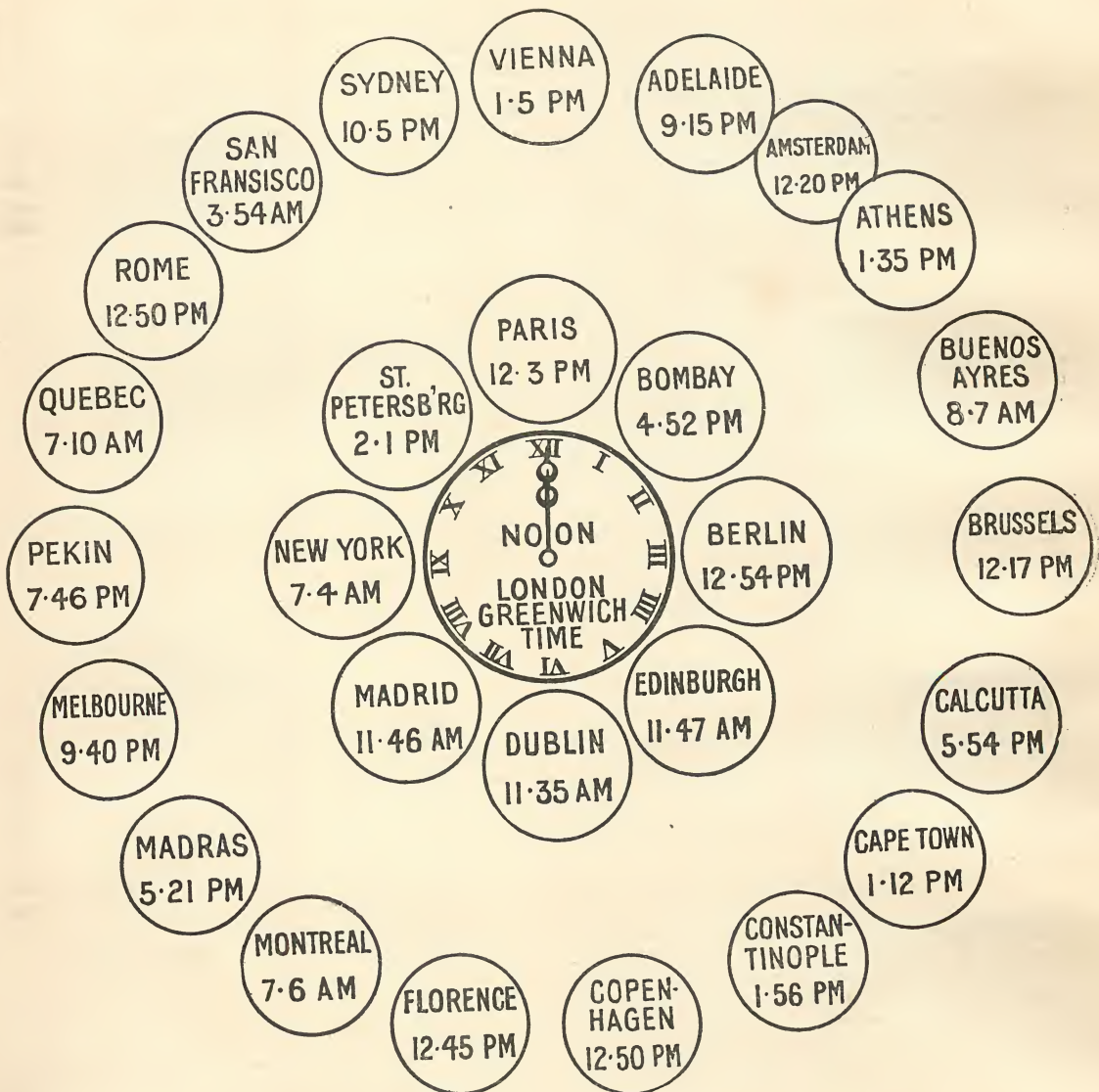
“‘It’s one of our mark-buoys!’”

Marley and O’Brien had left the shelter of the steering-house, and were standing against the protected space where the wall of the spar-deck joins the bulwarks.

The lieutenant shouted to O’Brien to go below and order the bluejacket on guard to release the prisoners

and bring them on deck. ‘We can’t let them drown like rats in a hole,’ said he, ‘and unless something happens we shall be on the rocks in less than an hour.’

Just as O’Brien was going below another flash lit the sea, and Mr. Graham, who was looking aft, saw



The Time at the chief cities of the world when it is Noon in London.

about five cable-lengths astern a black mass bobbing on the water.

It looked like a man's head in the deceptive light, but he knew from the distance it must be vastly bigger than that.

'Look here, O'Brien!' said he when O'Brien returned, 'watch for the next flash: there's something floating in the sea right astern.'

'It's one of our mark-buoys, sir!' said O'Brien when the next flash had revealed the object.

'How is she anchored?' asked the lieutenant.

'By a mushroom anchor and a mile of rope,' replied O'Brien.

(Continued on page 362.)

WHAT IS THE TIME?

VARIATION of time depends on longitude. East of Greenwich, every degree causes the clock to be four minutes earlier; every degree West, four minutes later.

Owing to the rotation of the earth on its axis from West to East, places in the East see the sun rise and set earlier than those in the West. For instance, at Calcutta, sunrise and sunset take place about six hours before they occur at Greenwich, while at New York the sunrise and sunset are about five hours later. The effect of this is that a traveller who may be going round the world eastwards will apparently

gain a day, while one going westwards will apparently lose a day, as will be seen from the following explanation. To an observer remaining in one place—at Liverpool, say—the interval between sunrise and sunrise is twenty-four hours. If, however, the observer moves eastwards during the day, then the interval between the last sunrise and the next will be less than twenty-four hours, because he will have reached a point where the sunrise is earlier than at Liverpool. If the distance travelled during the day is fifteen degrees of the earth's circumference, the sunrise will be one hour earlier than at Liverpool, and thus the time between the sunrise at Liverpool and that at the place reached will be twenty-three hours only. If this rate of travel eastwards can be maintained for twenty-four days, then the traveller will have completed the circuit of the earth, and the length of each day between sunrise and sunrise will have been twenty-three hours only. He will, of course, have marked off twenty-four days from his calendar, but on reaching Liverpool again he will find that only twenty-three days (of twenty-four hours each) have elapsed there, and that he has consequently marked off one day too many. On the other hand, it will be seen that if the traveller goes westwards, he will lengthen, instead of shorten, each day, until, when he reaches Liverpool again, the total time he will have used up in lengthening each day of his journey will amount to one day. He will have marked off on his calendar one day less than will have passed in Liverpool, so that it will be necessary for him to miss one day.

To rectify this interference with the calendar, it is customary, on ships travelling eastwards, when they reach longitude one hundred and eighty degrees, to repeat one of the days of the week, that is, to have two Mondays or two Tuesdays, &c., and for those travelling westwards to omit one day, that is, to pass from Monday to Wednesday, or from Tuesday to Thursday, and so on.

There is a recognised difference between the standard time of a particular place and the actual time as reckoned by the sun. A case was recently submitted to the United States Court at Louisville, U.S.A., to settle the question whether by 'noon' is meant twelve o'clock 'standard' or 'solar' time, and it was held that the usage or custom at the particular place governed the matter, and 'noon' must be held to mean 'standard' time in the absence of any understanding to the contrary.

PUZZLERS FOR WISE HEADS.

16.—SQUARE WORD.

1. The schoolboy's resource before a coming trial; often his chief delight when the trial is past; a compliment to the cook; a refuge for the hasty packer.

2. Queen; Love's own offering; fairest of the fair.

3. Home of ancient mysteries; to some a cradle, to others a goal.

4. So base as to be of little value; yet safe, moderate, and sometimes golden.

C. J. B.

[Answer on page 387.]

ANSWER TO PUZZLE ON PAGE 323.

15.—Outfit.

THE BREAD AND MILK.

FERDINAND, a well-to-do boy from the town, went one day in early spring for a long walk, and came to a farmhouse. He bought a basin of milk and a piece of bread from the farmer's wife, and sat down to his lunch under a tree.

Frederick, a village boy, who from sheer want of food had become thin and miserable-looking, stood and watched Ferdinand with famished eyes.

Ferdinand looked up all at once, and saw him, and noticing his hungry glance, was tempted for the moment to keep back some of the bread and milk for him; but his selfishness conquered the kind thought, and he ate the food all up. When he came to the bottom of the basin, he saw a little rhyme printed there. The blood rushed to his face as he read. He rose in an instant, ran straight to the farmhouse, and came back presently with the basin full of milk and a huge slice of bread. He handed the food to the poor boy, and sat down beside him and chatted to him, to put him at his ease.

When he had finished, Ferdinand pointed to the rhyme, and said, 'That's what made me think of you, and I think it ought to be written in every basin.'

The rhyme ran :

'Each time you read me, don't forget
That some one else is hungry yet.'

GLEANERS.

UPON the quiet Harvest-eves,
When reapers bear away the sheaves,
Unchecked the little children come
And have their own small Harvest-home;
Where older hands and feet have been,
The little ones may come and glean.

So in the world's great Harvest-field,
That light and joy and love doth yield,
The little ones may come each day
And bear their tiny sheaves away;
Where older hands and hearts have been,
The smaller ones may come and glean.

IN SCHOOL AND OUT.

VII.—THE RED-INK STAIN.

THE autumn term had been in full swing at Canbury for some weeks when one morning Meredith walked into school with an even more cheerful face than usual. By getting up at six o'clock he had found time to 'prove' his sums, and for once he felt convinced that he should get full marks in arithmetic, as well as his usual good ones for Latin and French.

He and Anderson were working as they had never worked before. Their work was always good, but a new boy named Cartwright had been put into their class, and was making it extremely difficult for them to keep at the top of it. In languages they could still hold their own, but in mathematics he was a formidable antagonist. It was not that they were on any but the most friendly terms with him, but he was so keen and capable a competitor that they felt

that he must be beaten at all costs. There was only one boy in the class who looked down on him, and that was another new boy, named Brown, whose perpetual boasts about an uncle who had recently been made a peer had earned for him the nickname of 'Snobby.'

Work began that morning with arithmetic, and as Meredith, who was the first boy to reach the class-room after prayers, got out his books, he noticed a fresh red-ink stain on his desk.

'Hullo,' he thought, 'Porter made a fine mess this morning.' Then, boylike, he foolishly proceeded to wipe it up with his handkerchief.

Mr. Lascelles was Meredith's form-master, and he also taught mathematics throughout the school. He was not by any means popular, for he combined with a genius for mathematics a sarcastic tongue and a habit of making favourites; and to the boys whom he did not like, among whom were Anderson and Meredith, he was barely fair.

When he came into the class-room that morning, and had as usual bidden each boy hand his papers to his right-hand neighbour, he went to his desk to fetch his Arithmetic Key. He opened the book at the right page, and then exclaimed, angrily, 'Some one has been using my Key! Look at this! The red-ink stain was not on the page yesterday.'

He held up the book for inspection, and the class gazed at the large red smear in astonished silence. Then Mr. Lascelles went on, 'I will now write up the answers on the board. It is more than probable that the culprit will be found among those whose answers are correct.'

He wrote up the figures, and each boy gazed with interest at the paper it was his business to check. 'The boys with correct papers in front of them will hold up their hands,' said the master, after a pause.

Six right hands were held up out of twenty-four, and the correct papers proved to be the property of Anderson, Brown, Cartwright, Meredith, Hawkins, and Windsor.

'Were any of you six boys in here after work yesterday?' asked Mr. Lascelles.

'Please, sir, I was,' said Meredith. 'I came back to fetch my Caesar.'

'Any other boy?'

'No, sir!' was the answer from twenty-three throats, and Meredith gazed in front of him defiantly, wishing with all his heart that he had not forgotten his Caesar the day before.

All eyes were turned on him, and he took out his handkerchief and began to blow his nose nervously.

'What's that on your handkerchief?' asked Mr. Lascelles.

'Red ink, sir,' answered Meredith, promptly. 'The porter had spilt some on my desk, and I wiped it up.'

'When?'

'This morning, sir.'

At that moment the porter came in with some coals.

'Porter!' said Mr. Lascelles, 'has any one had the key of this class-room since afternoon school, yesterday?'

'Yes, sir! Mr. Meredith.'

'Any one else?'

'No, sir!'

And did you spill red ink on Mr. Meredith's desk, in filling the ink-bottles this morning?'

'I didn't fill any ink-bottles this morning, and there wasn't any red ink on anybody's desk when I did the dusting,' answered the porter, crossly. He was not fond of Mr. Lascelles.

He went out of the room, and the master said, coldly, 'We will now go on with the morning's work, and I will report the matter to Mr. Davidson later.'

'Does that mean you think I have been cheating and telling lies, sir?' asked Meredith, angrily.

'Circumstances are certainly against you!' was the answer. 'I should advise you not to make matters worse by impertinence.'

Meredith smothered his wrath and sat down, but it was doubtful whether he, or, in fact, any other boy in the class, understood much of Mr. Lascelles' lesson.

Later on came the interview with Mr. Davidson, and, finally, the head master harangued the whole class. 'Now, look here, boys!' he said. 'I'm sorry to say it appears that some one has been meddling with Mr. Lascelles' Arithmetic Key, and, if any boy has done such a thing, I hope he will make what reparation he can by owning up. I know that suspicion rests on Meredith, but he has given me his word of honour that he didn't do it, and when a boy gives me his word of honour I believe him. Unless the culprit owns up, the whole class will be kept in on half-holidays for a month.'

The first week of that month was a very unpleasant one for Meredith, though Anderson, and, to his surprise, Cartwright also, offered to fight any boy in the school who dared to say that he cheated. They could not prevent the rest of the class from casting black looks upon him when a half-holiday came round. Nor could they trace and punish the boy who pasted inside his desk the doggerel verse:—

'He who cheats, and hides his crime,
Will jolly well be licked in time.'

It was all Anderson could do to keep up his friend's spirits at all, and they fell to zero when Cartwright apparently deserted his cause, and was heard openly boasting to Brown that he was safe to win the mathematical prize now that Meredith was out of the running. The boast aroused not only Brown, but the rest of the class, including Meredith, and Cartwright did not always find it easy to keep his head.

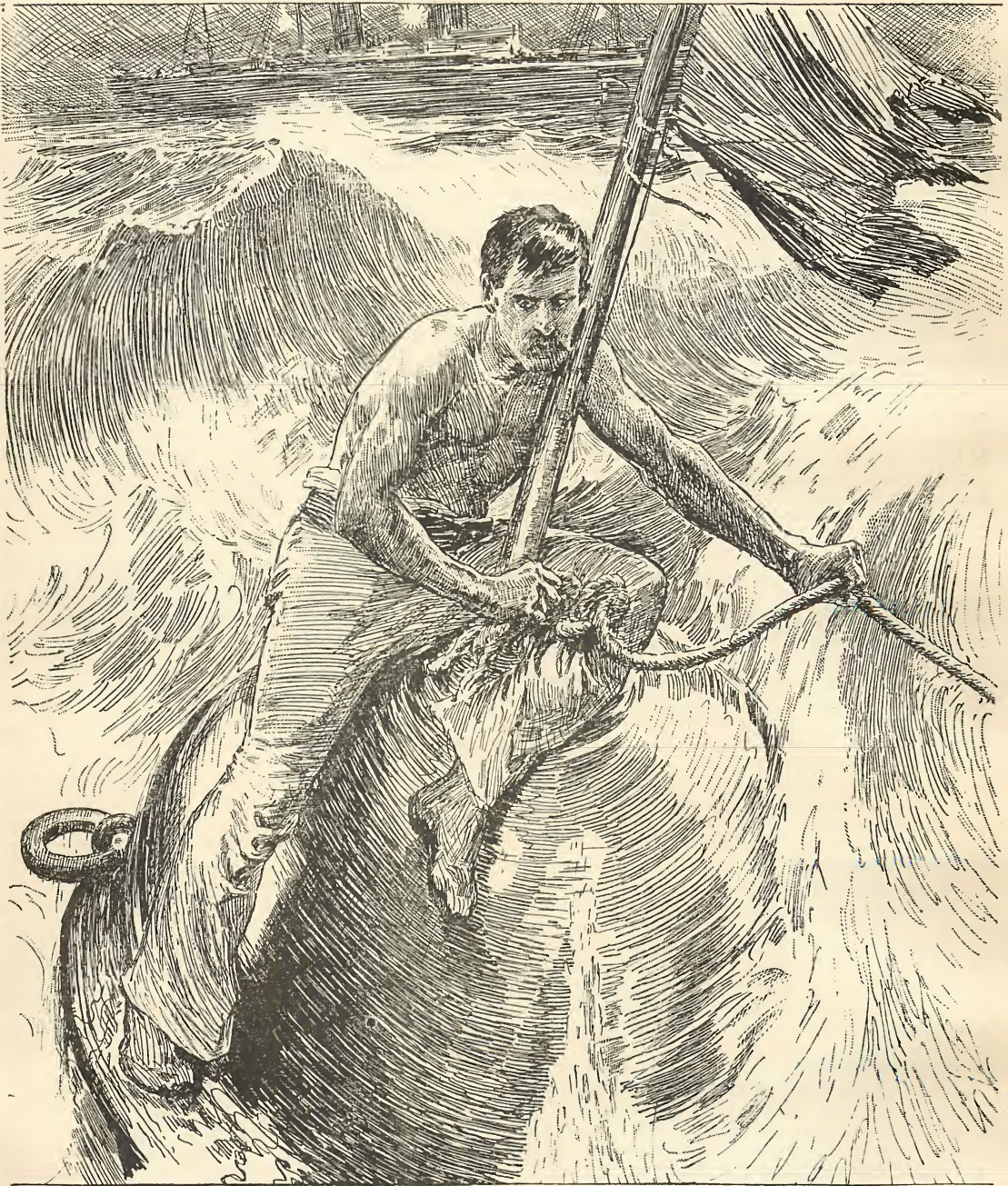
He seemed, for the time being, to have got out of touch with his new schoolfellows, and to prefer the society of the porter or of the masons who were putting on a roof to the new block of school-buildings, which had risen at right angles to the old during the summer holidays. Mr. Lascelles' class-room had one of its windows in the angle formed by the junction of the old and the new, and he grumbled greatly because a huge scaffolding-pole, with footholds for climbing, had been planted just outside it.

Another fortnight passed, and still the mystery of the red-ink stain had not been solved, and, in spite of all their efforts, Meredith and Anderson found that Brown and Cartwright were slowly creeping ahead of them in mathematics. Their work was so accurate that Mr. Lascelles himself remarked on it one morning, and set the whole class extra stiff work as a test for the two leading boys.

(Concluded on page 363.)



"He foolishly proceeded to wipe it up with his handkerchief."



"Still he clung on."

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 357.)

CHAPTER XXX.—MARK-BUOY NUMBER ELEVEN.

THE idea of anchoring the ship had never occurred to Mr. Graham, simply because of the great depth of the water. But here, floating in the open sea, was a ready-prepared mooring if he could only seize it.

Of course the mushroom anchor would not hold the ship unaided, but it might help the over-driven engines to hold her against the storm.

'What weight is the anchor?' he asked O'Brien.

'It all depends on the buoy, sir. Mark-buoy No. 5 has a half-ton anchor; but the anchor of mark-buoy No. 11, and I think this is she, is three-quarters of a ton.'

Another flash lit the buoy; it was drawing closer, showing in a terribly vivid manner how swiftly the ship was drifting on the coast.

'If we could only get hold of that buoy she might save us,' said Mr. Graham; 'but she will pass us by five or six fathoms at least, and no man could swim to her with a rope—it's impossible.'

'Who says "impossible"?' said a voice in the darkness behind him.

The shelter they were in made it practicable to speak and be heard, despite the raving of the storm. Mr. Graham turned to see who the owner of the voice was, and he saw, to his astonishment, Alonez, who had just been released.

'I say it,' replied the lieutenant. But Alonez was not listening, he was watching through the darkness for the next flash.

It came, and there floated the buoy still closer, so distinct that they could see the torn telegraph-flag flopping and thrashing about the mast on it, and the lamps long extinguished.

'Well, now, what do you say?' asked Mr. Graham, speaking to Alonez as though the latter were his equal, for the imminence of death wiped out the past for the moment.

'It is possible to be done, and I will try.'

'You will try?'

'I have swum the north fork of the Yuba in flood,' said Alonez. 'Quick—a rope! for there is no time to be lost!'

'There's a hundred fathom of thin wire-wove rope coiled down in the steering-house, sir,' said O'Brien.

'Bring the end of it, call Sawyer from the bridge and the deck-hands, and have the arc lamps switched on,' replied Mr. Graham, for he saw that the Brazilian was in earnest.

In a few moments the arc lamps were blazing, lighting up the spray-swept decks, and the sea for many yards round the ship.

Alonez had flung off most of his clothes, and, without a word or a moment's hesitation, he took the end of the rope and knotted it round his chest.

Nobody spoke; it was one of those supreme moments in which men forget that they have the power of speech.

Alonez stood for a moment staring aft over the bulwarks.

At last the buoy appeared vaguely. Just entering

the zone of light, she would pass the ship at some four fathoms distance.

Alonez clambered on to the bulwarks.

'Give him plenty of line,' cried the lieutenant; and before the words were well out of his mouth the man had plunged.

For a moment it seemed he would be dashed against the ship's side, but he struck out strongly from her, not swimming towards the buoy, but away from the ship.

They saw his head now disappearing in foam, now appearing again, ever increasing its distance from the ship and nearing the course of the on-coming buoy. The buoy had broken fully into the zone of lamplight: now sunk and half-invisible in the trough, now on the top of a wave, riding triumphant.

A great red buoy, on which, in letters of white paint, could be read—No. 11.

They could see the colours of the torn flag on its mast, and the rings which, if a man could clutch, might help him to climb upon it; they could see the water pouring off it in cascades as it dipped and recovered.

'Sawyer!' shouted the lieutenant, 'take the end of the rope over the bridge; I believe he will do it. We must moor her at the bow.'

He knew that to moor the ship abaft the bridge would mean that she would broach to. Sawyer and one of the deck-hands took the coil of rope up the after-bridge steps, and so forward down the forward steps, through the blinding storm. They halted for a moment just forward of the bridge, so as not to burthen the swimmer with too great a weight of rope, intending, when it was fixed to the buoy, to bring it right to the bow-balks and fasten it to the capstan.

Meanwhile the swimmer and the buoy were approaching one another. It was like the approach of a man to a wild and restive horse: the thing seemed to know that its capture was intended, for it increased its wild plunges, now rising out of the sea as if to observe its enemy, now smashing back into a wild mass of foam.

'He's gone! he is under it!' shouted Teddy.

'No; he isn't. Oh, he's letting it pass him!'

For a moment it seemed that all was lost.

But Alonez, who had kept his head in a marvellous manner, had not been so foolish as to attempt seizing the thing as he approached it; he let it almost slip by, and then, with one supreme effort, he seized a ring.

Next moment he was drowned in foam; but still he clung on, and the next the buoy slewed forward, lifting him by the ring high out of the water as if he were a featherweight.

A second later he was clutching the flagstaff.

'By Jove! but he *has* pluck!' cried Mr. Graham. 'Oh, well done! well done!'

The white figure straddling the heaving red monster was busy reeving the rope through the great ring by the flagstaff—but.

The buoy was now level with the bridge, riding the sea almost quietly, as if subdued by its captor. Then, all of a sudden, as if seized with a fit of rage, it took a mad half-turn, and seemed to shake itself.

The next moment the white figure clinging to it had vanished.

Mark-buoy No. 11 had already, as you will remember, the reputation of having taken two lives, and now, righting itself, it rode the foam as if triumphing over its third victim.

(Continued on page 374.)

THE FLAMINGO.

OF all the birds we see on land, on water, or in the air, there is hardly one to be found more curious than the flamingo. Young and old, from the earliest times, have watched the movements of this bird, alone and in troops, with amusement or wonder. The common flamingo is found along the coasts of South Europe, and is also abundant in all parts of Africa. But there is another kind of flamingo, unknown to the ancients, of deep-red colour, having black quills, which has its home in hot American countries. The name given to the common kind suggests its appearance: the bird is of a flaming or bright-red colour, and one poet remarks that this colour seems to glow when the flamingo is flying about sunset, as it often does. Though sometimes stragglers are seen, flamingoes generally feed in companies along the coasts or salt-marshes. They are both shy and watchful, and their lines resemble those of soldiers, several at a little distance from the rest acting as sentinels. Should danger be near, the look-out birds make a loud, trumpet-like sound, and the whole troop flies off quickly.

But the flamingo is most at home when it is walking or wading. It could not get on very well at wading if it had not such long legs. These enable the bird to hunt in shallow water for insects, snails, and small fish. Like other birds of the tribe, it is fond of standing upon one leg, the other being oddly bent. They are only about the thickness of a man's finger, yet, owing to their length and that of the neck, the flamingo is often five or six feet high when erect. Its body is about the size of a goose's body, and the head is small and round, with a bill of seven inches curved from the middle. When the mother-bird makes her nest of the marsh mud, she has to contrive a little hill, having a hollow on the top. In this the three eggs are placed, and she hatches them by sitting upon them with her legs hanging down.

In the olden time people ate flamingoes, and they have been praised as food, but those who have tried them in these days do not care for their flavour, which is somewhat fishy. Flamingoes can be tamed, and in some countries they are kept for the sake of the fine down, which is as good as swan's down.

IN SCHOOL AND OUT.

VII.—THE RED-INK STAIN.

(Concluded from page 359.)

AT half-past six on the following morning, the porter, as he went back to his lodge for breakfast, after opening all the school-windows and dusting the desks, was surprised to see the figure of a plasterer already at work on the scaffolding in the half-darkness. He would have been far more sur-

prised if he had left his lodge five minutes later. The first figure had completely disappeared, and a second was swarming cautiously down the scaffolding-pole outside Mr. Lascelles' window. It swung itself into the class-room and reappeared five minutes later. Then came a series of blood-curdling yells, which brought the porter from his lodge, the boarders from their beds, and Mr. Jackson, one of the masters, from his study, which was near.

The screams came from the scaffolding, on which could be seen two figures struggling on hands and knees. In five seconds Mr. Davidson was beside them, and found, to his astonishment, that the battle was being waged between Cartwright in a suit of overalls and Brown in pyjamas.

'What is the meaning of this, boys?' he asked; and Cartwright answered, without, however, letting go of his opponent:

'It's all right, sir; I have caught the sneak who has been cheating in our class-room.'

'Get up, boys,' said Mr. Davidson, who had now arrived; and, as soon as they were standing before him, Cartwright continued: 'I caught him as he was climbing out of the class-room window, sir, and he has got all the answers to the sums in his pocket.'

Brown tried to put on an air of innocence. 'I'm very sorry, sir,' he said. 'I know I ought not to have broken your rules, but the scaffolding looked so fascinating that I couldn't resist the temptation to climb it, and then Cartwright frightened me out of my wits by jumping on me.'

'He has got the answers in his pocket,' repeated Cartwright; 'make him show them to you.'

'Perhaps you had better hand me the contents of your pockets before we go any further, Brown,' said Mr. Davidson.

Brown tried, by a clever piece of sleight-of-hand, to get rid of the things inside his handkerchief, but Cartwright gave his elbow a sudden jerk, and the handkerchief, together with a piece of paper and a small key, fell at Mr. Davidson's feet.

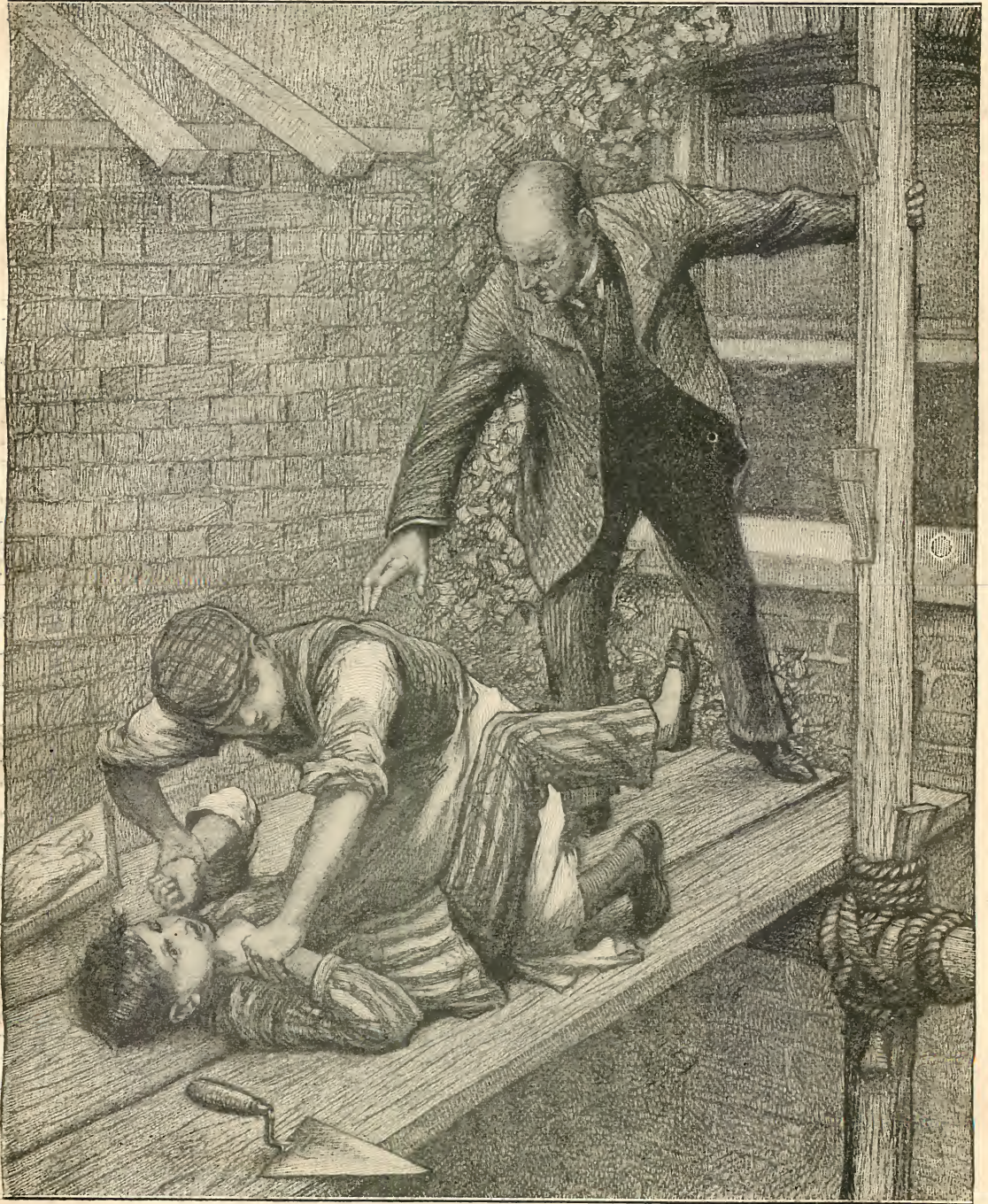
He picked them up. 'Now, boys,' he said, 'will you kindly follow me to my study?' When they reached there, Mr. Davidson opened the paper, which was covered with figures. 'Will you explain what this is, please, Brown?' he asked.

But Brown remained obstinately silent, and Mr. Davidson turned again to Cartwright, who was quite ready to relate his share of the morning's work.

'You see, sir,' he began, 'I was sure Meredith wasn't the cheat, so I made up my mind I'd find out who was. So I watched the marks carefully, and Brown's were the only ones that went down badly after the row. Then I jeered at him for letting me beat him, and his marks went up again like a shot. I knew he slept by himself just over Mr. Lascelles' room, so I soon saw that he could get the answers between half-past six, when the porter goes to his breakfast, and seven o'clock, when the masons begin to work. But I don't know how he got the desk-key, or whether he spilt red ink on Meredith's desk on purpose or not.'

'But about this morning?' interrupted Mr. Davidson.

'Oh! Mr. Lascelles gave us extra stiff work last night, which Brown could hardly do by himself, so I



“‘What is the meaning of this, boys?’”

borrowed this suit and hid under some sacks to watch for him.’

‘You managed very neatly, Cartwright,’ said Mr.

Davidson; ‘but another time it would perhaps be better if you consulted me instead of taking the matter entirely into your own hands.’



“Gold plates were not worth the trouble of washing up!”

Then he turned to the elder boy. ‘Brown,’ he said, sternly, ‘as you have nothing to say for yourself, you can go to your room till I send for you.’

But when Brown was sent for, it was found that he had vanished, nor did he ever return to Canbury.

From that day, Cartwright’s position at the Grammar School was firmly established, and no one rejoiced more than Meredith when at Christmas, though he and Anderson carried off the prizes for languages, Cartwright won the much-coveted mathematical one.

PRIDE, NOT MAGNIFICENCE.

WHEN a king, or a duke, or some other grand personage serves his guests with their dinner on a service of gold plate, we feel that this is a display of magnificence which may be forgiven. But it was not magnificence, but mere vulgar pride, which led the rich Roman banker, Agostino Chigi, when entertaining some famous guests in the middle of the sixteenth century, to give orders that the gold

plates, as they were removed, should be thrown from the windows into the Tiber, which flowed below.

Gold-plates—the banker would have the guests believe—were so numerous in his establishment as not to be worth the trouble of washing up!

But he did not allow his guests to know that nets had been previously stretched in the river to catch as many of the plates as possible!

THE ARISTOCRATIC HEN.



PRIZE-BRED hen crept out one day
Through a hole in the neat wire-netting :
She found the noise the other fowls made,
To announce to the world that their eggs were laid,
Was vulgar and very upsetting.

And so she selected a quiet spot,
Where the hedge was thick and shady.
‘Delicious!’ she cried; ‘what a peaceful nest !
The nightingales shall sing me to rest
With music befitting a lady.

'I shall lay a dozen of eggs at least,
Then hatch out a brood of babies;
My prize-bred eggs are far too good
To be used as a common breakfast-food
By a pack of human gabies.'

So she laid an egg on the moss brown earth,
Then cackled aloud with pleasure.
She quite forgot that her voice was shrill
As she sang again and again with a will,
'Behold! a treasure! a treasure!'

But her mistress heard the noise in the hedge,
And quickly peeped inside it;
She seized the bird by the wing and the leg;
She took the aristocratic egg,
And the very next morning she fried it.

And the prize-bred hen discovered with pain
That her hopes of glory were ended;
Her vulgar voice had betrayed her schemes,
And her mistress put an end to her dreams
By having the netting mended.

A. KATHARINE PARKES.

ROUND THE CAMP-FIRE.

V.—MR. SMITH.

WHEN I was in Canada, a few years ago (said Bobby, one evening), staying with some settlers, relations of mine, on the shores of Lake Erie, not very far from Armitage, in British Columbia, my cousin, Watson, taught me the mysteries of ice-yachting, which, I can assure you, is a delightful and exciting pastime. Imagine a sailing-boat, or rather a light wooden frame not at all like a boat, propelled by means of a sail attached in the usual fashion to a mast. The frame, which is triangular in shape, runs upon three skates, and in a good breeze the pace you can attain in one of these ice-yachts is tremendous, forty miles or more in the hour.

When going at this pace there is only one danger worth considering, and that is the danger of suddenly running into a crevice in the ice. In very hard frosts the ice has an awkward way of cracking and separating into crevices, which show a greater or less width of open water, from a mere crack of a few inches to a canal of fifteen feet. The smaller cracks, those which do not exceed a few feet in width, may be ignored by the ice-yachter, for his yacht will take them, so to speak, 'in her stride,' and proceed upon her way without delay or damage of any kind; but a crevice of ten or fifteen feet is a different matter, and, although it might be 'flown' in safety, the courage of the yachtsman who will put his craft at such an obstacle would be better described as 'foolhardiness.' Better far, when a wide crevice of this kind is suddenly sighted, to run the risk of a spill by putting the helm about and letting the ship skid, if skid she must, rather than take the almost certain souse into the freezing water, with the possible loss or wreck of your yacht.

Well, my cousin, Tom Watson, and I took the opportunity of a sunny day, one winter's morning, to drag out the ice-yacht and enjoy a few hours' sailing. There was a fine breeze, and the surface of the lake was wonderfully free of snow, for since the first fall

a succession of gales had kept the ice swept of its top-dressing, and the whole lake, so far as we could see it, was as good as a carefully prepared skating-ground.

'We will run across to Beverley, on the other side; that's nearly thirty miles,' said Tom. 'We shall have to tack a bit going out, but, coming back, how we shall fly along if this wind holds!'

Well, we had been out an hour and a half, tacking somewhat laboriously towards Beverley, which lay at a long angle from our farm, right up at the far end of the lake, when we perceived a solitary figure skating along in the same direction. He was flying along as though he skated for dear life, and when he turned and saw us he seemed to put on even more speed, as though he wished to race us.

'He can't want to avoid us,' Tom laughed, 'yet you would think it from the way he is exerting himself to keep ahead. Let's continue on this tack until we overtake him, and see who it is. I know most people about here.'

We did so, and soon overtook our friend, who, when he perceived that we were bound to catch him, stopped and waited for us. He examined us closely as we neared him, and it seemed to me that he had expected us to be some other party. He nodded familiarly.

'Morning,' he said. 'My name's Smith. I would take a lift Beverley way, if I was offered it.'

My cousin laughed. 'I don't think I know you, do I?' he said. 'You must be a stranger in these parts—my name's Watson. You can come aboard, if you can find room.'

'Glad to know you, sir,' said Mr. Smith. 'Yes, I'm a bit of a stranger. Thanks, I will squeeze in next to this gentleman.' He nodded to me, and took a seat by my side. 'Off you go,' he added. 'I'm ready. Haven't seen another ice-yacht out, have you—Cobden's, of Armitage?'

We had seen no ice-yacht.

'Oh, he will be out presently. It's a kind of race, you see. I have to go to Beverley and back. I may take a lift for fifteen miles and skate the rest—take a lift, if I can get it, that is. They are to sail all the way and give me three hours' allowance out and then home. If I take a lift of fifteen miles, I knock off one hour of my allowance. Know Cobden's yacht?'

Watson laughed. As a matter of fact, Cobden and he were great rivals in the matter of ice-yachting. Cobden was firmly convinced that his yacht, *Boreas*, was a mile an hour faster than Tom's, which was called the *Northern Star*. My cousin, on the other hand, was as certain that his yacht could easily show her heels to *Boreas*, whether on a tack or running before the wind. They had never raced, though they had often argued.

'Yes, I know Cobden's yacht well,' he replied. 'I think I can promise you will gain something on your fifteen-miles run.'

'Good,' said Smith. 'Your ship moves well—that's certain!'

And move well she did, tacking splendidly for an hour or so, until, in fact, we were close to Beverley—that is, within three miles or so. Then we had the misfortune to meet with an accident. We were scudding along at a good pace when suddenly Tom,

who was at the helm, sang out, 'Hold on, both of you—there's a crevice on ahead! I shall fly it if it is not too wide.' The next moment he shouted, 'Too wide—can't do it—hold on very tight; we shall have to twist round into the wind!'

Almost before the words were uttered the little ship went about with bewildering suddenness. Though holding on as tightly as I knew how, I found myself torn abruptly from my seat and spinning round and round, in a sitting posture, upon the bare ice, for all the world like a humming-top, except that I don't suppose I exactly hummed, though I have no doubt I sang out.

My two companions were in the same plight. Tom went sliding due north very rapidly indeed, as though he had suddenly remembered an engagement at the North Pole, and couldn't wait to explain. Mr. Smith's mode of progression was round and round, like my own; he spun quite as rapidly as I, and was still spinning when I stopped, which proved, as he presently informed me, that he would have made a better top than I.

But, alas! our dear little *Northern Star* was damaged—not very seriously, indeed, but the accident would lose us a good hour in time, before Tom could put her in order. Two of her skates had been twisted out of gear, and if it had not happened that my cousin was one of those people who see more than a hand's-breadth in front of them, and had come provided with the necessary tools and gear for repairing such damages, we should have been obliged to push our little yacht as best we could into Beverley. But the repairs occupied a good hour, and when that period—during which Mr. Smith had shown considerable anxiety—had almost passed, I suddenly caught sight of another ice-yacht coming after us, or rather sailing in the course which we had followed.

'Here comes another yacht!' I exclaimed.

Mr. Smith started round. 'That will be Cobden,' he cried. 'What a fool I was not to—'

'Yes, that's the *Boreas* all right,' said Tom, looking up from his work. 'I'm just ready, and we will race her into Beverley. I shall be glad of the chance to show her our heels!'

In another minute we were ready, the yacht was slewed round into her course, clear of the crevices, and we were all aboard. The *Boreas* was sailing well, and had reached within half a mile of us.

'Aren't they shouting to us?' said I. 'They seem to be gesticulating.'

'I expect they want us to race!' replied Tom. 'Well, I'm on!'

Off we went, skirting the ice-crevice, and *Boreas* came flying after us. We gained a little, to our delight, and I was surprised to observe the keenness with which Mr. Smith watched our progress, and his pleasure when it became obvious that we were gaining. We should, in any case, have gained half a mile upon the *Boreas*, but when within ten minutes' sail of Beverley she came to grief.

'I suppose we ought to go back and offer assistance,' said Tom.

'Well, if you do,' Mr. Smith remarked, 'I think I will be off on foot. Good-morning, gentlemen both, and thank you for the lift. Keep those fellows an

hour where they are, will you, please, to make up for the hour I wasted!'

He laughed and nodded to us, then he stepped out upon the ice and skated away for the shore, at the nearest point. As we watched him for a moment, a gust of wind brought the sound of a chorus of shouts from the *Boreas*. The four men aboard of her were gesticulating like mad things, and evidently bawling to us at the top of their voices, though it was impossible to make out what they said.

'They want help, poor chaps!' said Tom. 'We had better go back and see what's up. Probably Cobden doesn't carry repairing gear.'

But when we neared the *Boreas'* party their shouts became distinguishable, and we learned to our surprise that we had somehow offended Mr. Cobden and his companions, for their words betrayed angry feelings.

'Why on earth,' Mr. Cobden roared, 'couldn't you listen to what we were saying?'

'Because my powers of hearing are limited,' replied Tom, good-naturedly. 'Why, what's up? We are on our way to help you as fast as we can!'

'Help us—it's too late to help us! You should have come before. There's the rascal just climbing ashore. He will be lost in the forest in a minute.'

'What rascal?' asked Tom, his face falling a little.

My heart began to sink a trifle. What had we done, I wondered; had we somehow made fools of ourselves?

'Why, that blackguard you took aboard, and calmly allowed to escape before my very eyes. Do you know what you've done? That chap is one of my clerks' (Cobden was president of the Great Northern Bank at Armitage); 'he has just robbed the bank of six thousand dollars, and you calmly let him go! He must have had the money about him.'

'I noticed,' I faltered, 'that his pockets bulged a good bit. He said it was sandwiches.'

Well, there was no appeasing Mr. Cobden. We pointed out that 'Mr. Smith' had told us a tale of a race, and so on, which we believed, and that we were not in the habit of suspecting every stranger we meet of robbing a bank. But Mr. Cobden was angry and unreasonable, and after offering assistance, which was refused with scant courtesy, we retired and resumed our sail homewards.

I may here mention that though a careful search was made for Mr. Smith, a search in which both Tom Watson and I took a personal interest, he was never found, but got clean away with his booty.

'Now we shall have a magnificent run home before the wind,' said Tom, as we prepared for departure. 'We shall do the thirty miles in an hour, or under. Take the exact time of starting.'

'Why,' I faltered, fumbling at my waistcoat, 'where's my — why, my watch and chain have gone!'

'So have mine!' exclaimed my cousin. 'How could the rascal possibly have—'

'He had a whole hour while we were mending, you see,' I observed.

'And it is explained,' Bobby added, 'how it was that in the vain pursuit of Mr. Smith, on that and several subsequent days, both Tom and I took a deep personal interest.'



“‘Here comes another yacht.’”



"I don't like wearing spectacles a bit."

THE PROFESSOR.

I HAVE had my portrait taken, by a clever artist, too,

His talent is by all my friends confessed;
He has painted me in spectacles—a funny thing to do!—

But still, you see, he knows what suits me best.

He calls me 'The Professor'—'tis because I look so wise,

The title really suits me to a T;

I'm very smart and 'knowing,' you can tell it by my eyes—

My master says I'm clever as can be.

'Twixt you and me, I'm rather glad the artist's work is done,

I don't like wearing spectacles a bit;

Although I look so good and grave, I love a 'game of fun,

I'd rather scamper any day than 'sit.'

I make a pretty picture, so I heard my master say,

And who could be a better judge than he?

I shouldn't be at all surprised if, on some future day,
You saw me in the Royal Academy.

MARIAN ISABEL HURRELL.

NATURE AT HOME.

Some Every-day Habits of the Animal World.

IV.—FEIGNING DEATH.

ONE of the most remarkable of all animal instincts is that of feigning death to avoid an enemy. Creatures of all degrees, humble and high, in the scale of creation are known to practise it, and generally with success.

Only a few days ago I came across two of the large dark-blue burrowing beetles (known scientifically as *Geotrupes typhaeus*), which one occasionally meets in country walks, and, picking them up for more careful examination, I really thought, as they lay in my hand, that they were dead. I turned them over several times, and even examined them with a lens. But not a sign of movement did they give, till, just as I was about to put them down again, I thought I saw an antenna move; so, holding my hand quite still, I waited and watched. And, surely enough, slowly and cautiously the legs began to move, and, meeting with no fresh alarm, they began to crawl away.

Many birds practise this deception, and with wonderful skill. One of the South American tinamous—often, but erroneously, called a partridge—when captured, after a few violent struggles to escape, drops its head, gasps two or three times, and, to all appearances, dies. But the moment it is laid upon the ground it darts off, and is soon beyond the reach of the astonished captor. The Gaucho boys of La Plata take advantage of this habit in a small bird known as a silver-bill. As soon as the poor victim is marked down, a stick or stone is hurled at it, and a rush made towards it. The bird, as if stunned by such unkindness, sits perfectly still, and allows itself to be taken without showing the least resistance, though evidently in mortal fear, which ends in an apparent swoon.

We need not, however, go to the far-distant region of South America for instances of this kind, for our common landrail, or cornerake, if wounded, and taken up in the hand, at once feigns death. Immediately, however, it perceives that attention has been distracted, it promptly makes good its escape. The naturalist, Jesse, tells the following story: 'A gentleman had a cornerake brought to him by his dog, to all appearance quite dead. As it lay on the ground, he turned it over with his foot, and felt convinced that it was dead. Standing by, however, in silence, he suddenly saw it open an eye. He then took it up; its head fell, its legs hung loose, and it appeared again quite dead. He then put it in his pocket, and before long he felt it all alive and struggling to escape. He then took it out; it was lifeless as before. Having laid it again upon the ground and retired to some distance, the bird in about five minutes warily raised its head, looked round, and decamped at full speed.'

The little Azara's fox of South America also employs this device for getting out of a tight corner. But the most celebrated performer of all is the opossum. Hence, indeed, the phrase, 'playing possum.' Whenever one of these creatures is overtaken or 'cornered' by man, he invariably feigns death, and, drawing back his lips so as to expose the gums and teeth, looks as if he had been dead for a month. 'You may roll the creature about with your foot,' says Mr. Ingersoll, 'explore the pouch, pick it up and carry it by its tail, offer it almost any indignity, and it will neither resist nor complain; but take your eye off it, as it lies upon the ground, and it will jump up and scuttle away, or, if you pick it up carelessly enough to give it a chance, it may nip you savagely.'

But man himself has on occasion found it expedient to 'play possum.' Cases are on record where men, by feigning death, have escaped the awful claws of grizzly bears, or even the knife of an enemy on the battlefield.

But, taking the animal kingdom as a whole, the cases of this death-feigning instinct are rare. Perhaps we ought not so much to wonder at this as why *any* animals should have developed so strange a device.

W. P. PYCRAFT, F.Z.S., A.L.S.

A CURIOUS CLOCK.

GROLIER DE SERVIERE was fond of designing strange time-keepers, but perhaps his strangest was 'the mantelpiece and the mouse.' On a narrow ledge projecting from the front of the mantel, and extending its whole length, he placed a mechanical mouse with a metal nose. On the ledge the hours of the day were marked, and just *behind* it, concealed by the stone and woodwork of the mantel itself, was a strong magnet, which was made to travel slowly along the ledge by clockwork, keeping time like a clock. The mouse on the ledge, under the influence of the magnet, of course travelled with it, and if you wanted to know the time you simply looked at the figures over which his metal nose happened to be. Unlike other mice, he was a slow mover: it took him twelve hours to go from one end of the mantelpiece to the other!

THE SACKFUL OF EARTH.

A RICH man begged his neighbour, a poor widow, to sell him a little piece of land she possessed, in order to enlarge his garden. Fearing that she would suffer for it if she refused, the poor woman consented, but while he was looking over the ground, she came to him and said :

'Here is an empty sack. I want you to fill it with earth, so that I may have, at least, a little of my father's inheritance always with me.'

The rich man said, 'It's a foolish idea of yours, but I will do it.'

When the sack was full, the widow said, 'And now I want you to take the sack of earth home for me.'

The request made the man very angry, and he refused. But she pressed him again and again, saying that she could not lift it. In the end he consented, but when he tried to lift the sack to his back, he was bent by the weight, and could not move with it.

Then said the widow earnestly, 'If that load of earth is too heavy for you, how then will the weight of all the land you are taking from me press on your shoulder in the next world ?'

The man was so astonished at the speech that he gave up all thought of taking the land, and went away ashamed of himself.

THE PLATE-MAKER.

THE potter's wheel is one of the simplest, one of the oldest, and one of the most useful machines ever invented. It consists of a small round table, a little larger than a plate, which is supported on a slender upright iron rod or axle, the lower end of which turns freely in a socket. We might, indeed, compare the table and its axle to a great flat-headed top with a very long peg. On the lower part of the axle a large horizontal wooden wheel or disk is placed, and by means of this the table may be made to revolve very quickly. The whole is, as a rule, conveniently combined with a seat and a bench or table, so that the potter may sit at his work and have his clay and his tools near him.

Sitting at his bench, the potter sets his little table rapidly spinning by giving the heavy wheel a thrust with his feet, and the wheel, acting like the flywheel of a steam-engine, regulates and prolongs the movement. Taking up a lump of clay, he throws it on the revolving table, and when he presses his hands against it, the rotary motion shapes it into a rounded lump. By squeezing and pressing it in various ways, he is able to give it any rounded hollow shape which he may desire.

It is easy to see how great was the help which the wheel gave to the potter who invented it. The earliest potters had to shape their bowls, jars, and urns with their fingers only, squeezing them in a little here and pressing them out a little there, trusting to their eyes alone to tell them when the shape was correct and when it was faulty. But when the clay was whirling round upon the wheel, the potter had only to keep his hands in a fixed position, and the very movement of the wheel gave to the clay a circular shape far truer than that which any unaided

hands could give it. In our museums there are many examples of earthen vessels made by the unaided hands of the potters, and we always find that they are more or less defective in their circular shapes.

The wheel is usually turned by the potter himself, but sometimes a boy is engaged to turn it for him, and in the best modern pottery works it is turned by machinery. There are, too, various kinds of potter's wheels, named according to the uses to which they are put. The ordinary wheel is called the thrower's wheel, because the potter throws his clay down upon it with a good deal of force every time he begins work. Cups, basins, and jugs are rounded out on the thrower's wheel. It is a most interesting sight to see them shaped between the potter's fingers. His movements are so slight, and yet the changes in the clay are so striking and so quick, that the vessel seems rather to unfold by magic than to be formed by human hands.

But we will pass by the thrower, and take our stand by the plate-maker. As a rule the plate-maker stands to his work, and his wheel is revolved by a boy or by machinery. It is known as a 'jigger.' On the flat top of the wheel the plate-maker places a plaster mould, the upper surface of which is modelled to form the hollow face of an overturned plate. As the face of the plate is to be hollow, the surface of the mould rises up like a flat-topped boss or bulge, and every step, fluting, or ornament on the rim of the plate is modelled on the mould. The workman, taking a lump of carefully-prepared clay, rolls or beats it out into a flat cake, and lays it on the mould. Then, starting the wheel, he presses the clay with a wet sponge until it fills every hollow of the mould, and the face of the plate is modelled.

The plate-maker has now to shape the back of the plate, which is uppermost on his wheel. He does this by means of a tool known as a profile. If we hold a plate upside down before our eyes and level with them, the outline which we see is the profile of the plate, and the plate-maker's profile is simply a thin knife-blade, having its lower edge cut to fit the profile of the plate's back from the centre to the edge. This knife-blade is fixed in a little support, which stands on the plate-maker's *bench* in such a position that it projects horizontally over the wheel, and it also slides up and down in its support, on the edge of which there are marks to guide the workman in moving it. Setting his wheel in motion, he lowers the blade gradually until its profile touches the clay, and begins to pare away the back of the plate to its own shape. He continues to press down the profile until it reaches a certain mark on its support, when he knows that the plate is cut sufficiently thin. The profile is then raised, the mould and the clay are lifted together off the wheel, and put aside for the clay to dry, while the workman, taking a new mould, begins to make a new plate in the same way.

When the drying plate has set quite stiff, it is replaced with its mould on the jigger, and carefully smoothed; and when it is still drier, and may be removed from its mould, the face of it is carefully brushed over to remove any loose pieces or dust. It is then ready to be placed in clay boxes or 'saggers,' and carried to the kiln, where the saggers will be surrounded by flames for a day or two, and the clay

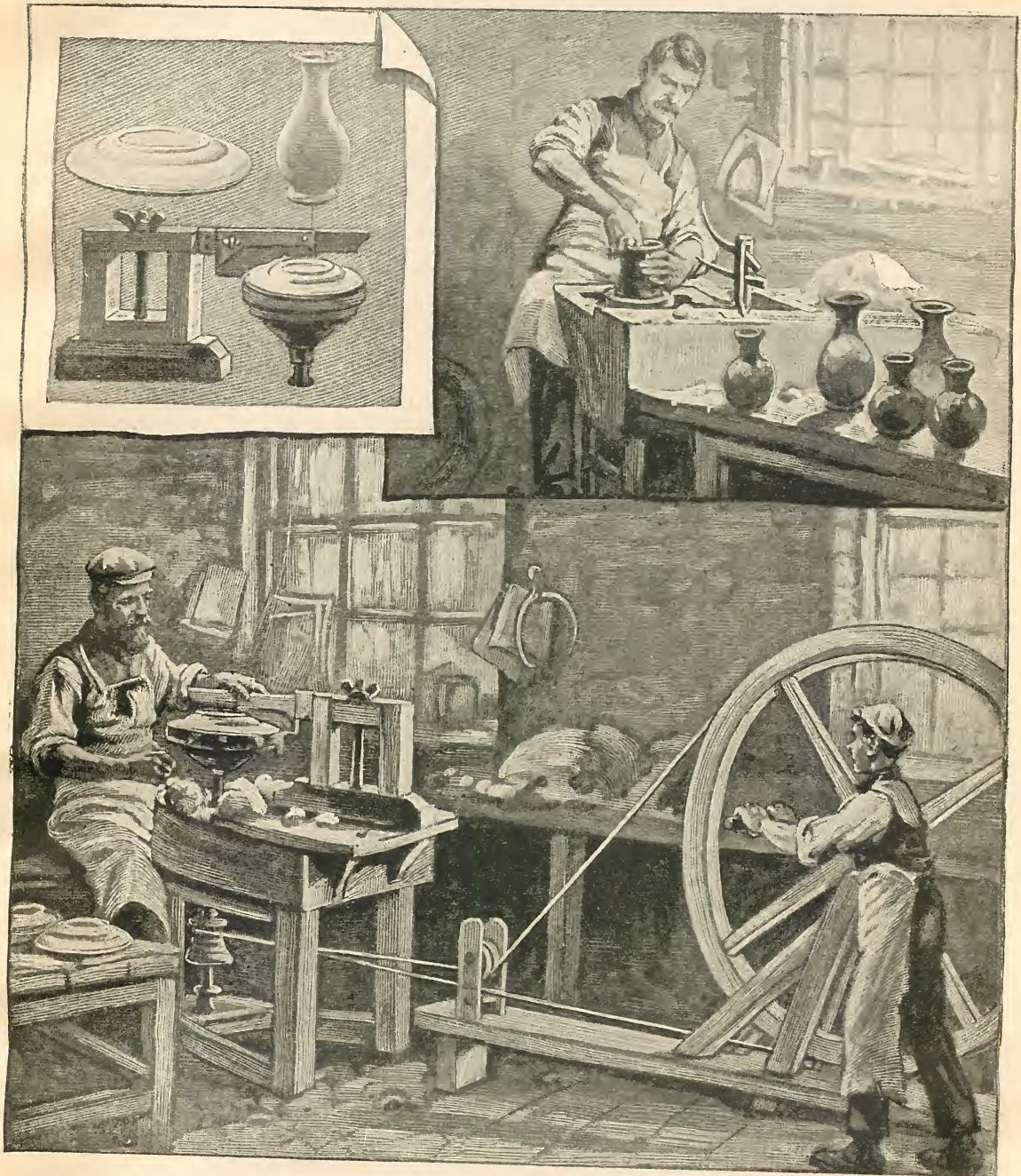


Plate-maker's "Profile."

A Plate-maker at Work.

A Potter at Work.

will be burnt into hard earthenware or porcelain, according to its composition. In passing through this fierce heat, the plate will be reduced in size, and it has, in fact, been made larger than required in order to allow for this contraction. The plate

may also have the misfortune to be bent or spoiled in various ways, but if it should escape these accidents, it will come out whole, hard, shapely, and clean, and will then be ready to receive its glaze, and perhaps also some coloured decoration.



"Its frantic squeals soon brought the herd to the spot."

THE BACON OF RENNES.

DURING the French wars of King Edward III., the English army, under the Duke of Lancaster,

laid siege to Rennes. The siege lasted until the garrison were in sore straits for food, but the defenders, under the brave old knight De Penhoët and the famous Bertrand du Guesclin, still held out

gallantly. At length the Duke of Lancaster, hoping to induce them to make a sortie which would give him the chance of cutting them off, ordered a large herd of pigs to be driven close to the wall.

Such a supply of food, he thought, must appeal to the hungry soldiery, and so indeed it did, but the result of the stratagem was not quite what the Duke expected. De Penhoët ordered one of the few hogs remaining in the town to be suspended over the battlements, and its frantic squeals soon brought the herd outside to the spot, to sympathise with their friend by a chorus of grunts and squeaks. The poor prisoner was then let down among them, and the rope cut. As De Penhoët expected, the Rennes hog made use of its liberty to trot back to the city gate, its new acquaintances from the English camp following pell-mell, and, as the gates were cautiously opened for a few minutes, the Duke of Lancaster had the mortification of seeing his fine supply of bacon received with rejoicing by the hungry troops in Rennes.

A HUNDRED YEARS AGO.

True Tales of the Year 1808.

V.—THE BATTLE OF VIMEIRA.



NE of our most famous battles, the battle of Vimeira, was fought in August, 1808, and is memorable for being the first of the British successes in the Peninsular War.

Sir Arthur Wellesley (afterwards the Duke of Wellington) was, by a fortunate chance, in command on this occasion. I use the expression 'by chance' because, so ignorant was the British Cabinet of military organization at that time that three senior generals—

Moore, Burrard, and Dalrymple—had been sent out from England to take over the command of the good soldiers who had already sailed from Cork.

Until these generals arrived, these troops were under the command of Sir A. Wellesley, and on July 19th the troops, reinforced by recent arrivals to sixteen thousand men and eighteen pieces of artillery, were drawn up at the little seaside village of Vimeira, on the coast of Portugal, with the French within four miles of the British outposts.

Sir Arthur expected an immediate action, and was quite ready for it, when, to his dismay, he heard that one of his superior officers, Sir Harry Burrard, had arrived.

Sir Arthur, of course, at once went on board the frigate, where Sir H. Burrard still remained, and reported matters, telling him that he had projected a march for that very night to turn the French left.

'I am awaiting reinforcements,' was Sir H. Burrard's amazing answer. 'Sir John Moore may arrive at any moment with more troops, and I shall not land till he comes, and were I to land I should forbid the projected march.'

It was in vain that Wellesley showed him the utter impossibility of remaining quiet where both armies now stood, and that any delay would give Junot the advantage of the initiative. Sir Harry Burrard was an incompetent general, and would not be convinced.

However, as he would not land and assume command, Sir Arthur Wellesley had full powers, and on the following day was fought the sharply-contested battle of Vimeira, which ended in the complete defeat of the French, much to their amazement, for Napoleon's soldiers had hitherto been accustomed to victory on every occasion.

This was, however, the first time for over a hundred years in which the French had met the British arms in battle, and they had now to experience the stolid firmness of British soldiers.

At one time, indeed, Sir Arthur seemed hard pressed by the French, and one of his generals sent to ask if he should bring up his brigade and help the Commander-in-Chief.

'No, sir,' Sir Arthur replied. 'I am not pressed, and want no assistance. I am beating the French, and am able to beat them wherever I find them.'

At two p.m. Junot and his troops were in full flight, and Sir Arthur was preparing to follow and to cut off their retreat upon Lisbon, when, to his bitter disappointment, Sir H. Burrard now saw fit to land, and, assuming command of the troops, bade them await the arrival of Sir John Moore before pursuing the flying enemy.

Sir Arthur could not restrain the bitterness of his disappointment at this order, and, turning to the officers of his staff, said, 'Gentlemen, nothing now remains to be done but to go and shoot red-legged partridges!'

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 363.)

CHAPTER XXXI.—THE LAST HOPE.

THE spectators of this tragedy had no time to speak or even think about it. The terrible question before them now was, had the rope been properly secured, and, if so, would the buoy-anchor hold the ship? They went forward to the bows, where Sawyer and his mate had fastened the rope, turn after turn, about the capstan. The rope was slack now, but when the ship had drifted a little more the strain would come on it, and then the question whether they were to live or to die would be settled definitely.

The high barks protected them somewhat from the full force of the wind, but the sea came over them in sheets and showers of spray. Slowly the buoy went astern into the night, and slowly the rope attached to it tautened. At last it became rigid. Half a minute passed: the rigidity did not relax.

'She holds, sir!' said Sawyer.

'Thank heaven, I believe she does!' said Mr. Graham.

There could be no doubt of it. Away down, a mile below the surface, the mushroom anchor, stuck in some crevasse of rock, was holding the ship,

helped by the engines, in the teeth of the storm. Holding her for the moment, for at any second something might give way.

'What's the breaking strain of that wire-wove rope?' asked the lieutenant of O'Brien.

'I don't know, sir. It's about half as thick as grapnel-rope, and the breaking strain of that is thirty tons.'

'Put it at fifteen tons,' said the lieutenant; 'and it might snap like barley-sugar any moment. We must take precautions. I'm going to anchor the ship with the anchor at the bows.'

'In a mile of water?' cried O'Brien, in astonishment.

'Ay, in a mile of water. I shall use a doubled grapnel-rope. That gives us a breaking strain of sixty tons. Bring all hands forward, open the cable hatch, and bend on the double rope to the picking-up drum.'

Teddy rushed aft to execute this order, the daring of which delighted and astonished him, as well it might; for, practically, the feat that Lieutenant Graham proposed to perform was as follows:—To disconnect the great anchor from its chain, and substitute for the chain a hawser, to attach the doubled grapnel-rope to the great ring of the anchor, to lower the anchor on the hawser some fathoms, so as to get the doubled grapnel-rope true over the little wheel at the bow, so that they might pay out without friction; to lower away the hawser some fathoms more, so as to get the weight of the anchor slowly on to the grapnel-ropes without too sudden a strain; then to put stoppers on the hawser and cut it, leaving the anchor dangling by the grapnel-ropes. Lastly, to lower away the anchor to the bottom—and all this in the teeth of a hurricane!

Such a feat, of course, would be impossible in any ship but a cable-ship, equipped for deep-sea work, as the *Kingfisher* was.

The men came tumbling forward, all except the Spanish prisoners, who were huddled in the galley in terror, refusing to do anything, and in a minute the arc lamps forward were switched on, and the decks busy, despite the hurricanes of spray and the driving wind. The cable hatch was opened, and the ends of the ropes brought up and fixed round the drum of the picking-up gear, whilst Sawyer took charge of the picking-up engine and connected it with the main boilers. Just as this was being done a terrible cry went up:

'The buoy-rope has parted!'

It was only too true, the rope was hanging slack: it must have chafed at the coupling and gone. The ship was adrift once more, and it would take nearly an hour before the anchor could be lowered to the bottom!

'Heave ahead!' cried the lieutenant, despair at his heart, but seemingly quite cool and collected. 'Put the beef into it; we will have the anchor down before we're ashore.' Then, leaving O'Brien to superintend the men, he made his way with all speed to the engine-room.

'Arnold!' he shouted down the hatch, 'every ounce of steam you can put on her; the buoy has gone adrift! Blow her up or burst her, but give us time! I'm getting an anchor down.'

'Ay, ay!' said Arnold. 'Can you give me some more men to stoke? The stokers are about done.'

'I will get you men,' answered the lieutenant.

He went forward and burst into the galley where the prisoners were. 'Up you get! up you get!' he cried, kicking them on to their feet. 'Down to the stokehold with you, and stoke for your lives!'

He drew his revolver and herded them along the deck to the engine-room hatch, down the engine-room stairs, and into the stokehold.

In a moment each was given his shovel and long rake, and had taken the place of the tired-out naval men.

'Stick here, Thompson,' said Mr. Graham, giving his revolver to one of the Englishmen, 'and shoot the first man that shirks. You have my orders to do so.'

He returned to the deck. The men forward were working like demons. The armourer of the destroyer, who had fortunately been brought on board with his implements, was busy disconnecting the chain-cable of the anchor, which was already attached to the hawser. How far they were from Gommera no one could tell, for the lightning had ceased, though the storm had not abated one whit.

Just as the grapnel-ropes were being got over the wheel at the bow, and the anchor was being lowered so that its weight should gently come on them, a new sound mixed itself with the yelling of the wind, a sound like the faint, far-away beating of drums. It was the voice of Gommera, the thunder of the waves against the cliffs.

'Lower gently,' cried Lieutenant Graham. 'That's the way! Is the strain full on the grapnel-ropes yet?'

'Ay, ay, sir!' replied the man in charge.

'Then cut the hawser.'

Two blows of an axe sounded, the hawser parted, and the anchor was now swinging by the grapnel-ropes alone.

'Lower away!' cried the lieutenant, and, Sawyer releasing the clutch, the great drum revolved, paying out the ropes. It could not revolve very fast, because the two ropes had to be kept true upon it, and any hitch or entanglement would be fatal.

Louder now, and far more awful than the voice of the storm, came the thunder of the surf on Gommera. The engines were doing their uttermost, but the ship was being driven steadily back upon the lee shore.

'Do you think we shall do it, sir?' said O'Brien.

'I don't know,' replied the lieutenant. 'I ought to be on the bridge, but I daren't leave here whilst the paying-out of the cable is going on.'

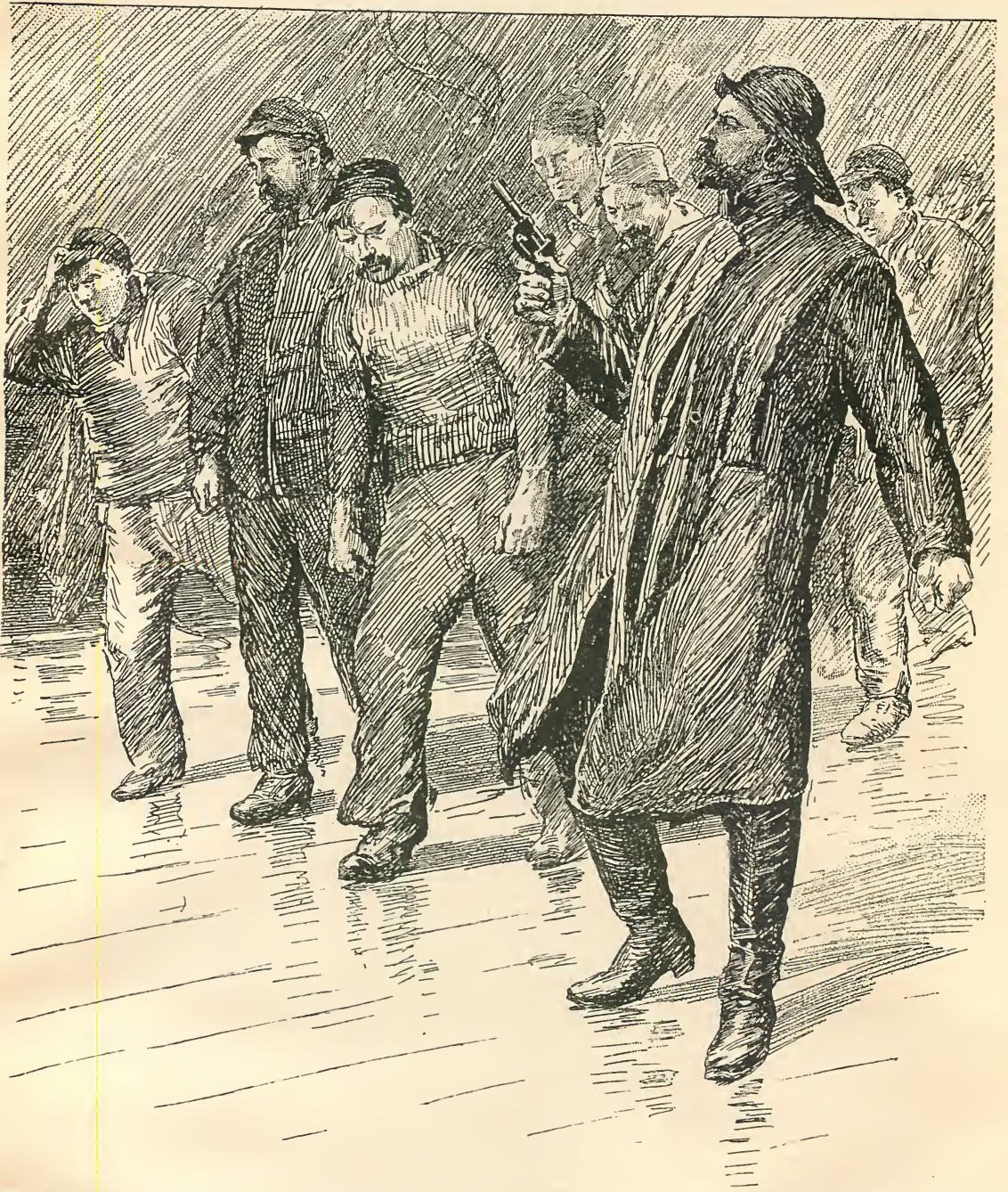
The noise of the surf thundering against the cliffs now dominated the screaming of the wind; so close and appalling was it that every moment the lieutenant expected to hear the crash of the stern taking the rocks.

Then came the welcome cry, 'Anchor's on the ground, sir!'

'Ay, but will she hold?' muttered the lieutenant.

Half a minute, and the tautening of the ropes decided the question. The anchor held.

(Continued on page 378.)



“Down to the stokehold with you!”



“ ‘Am I dreaming, or is that the *Kingfisher*?’ ”

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 375.)

CHAPTER XXXII.—DAWN.

'NOW,' said Lieutenant Graham, 'we have done all we can do, and we have not done it badly, though I say it myself; from this moment the affair is out of our hands.'

He went on the bridge and sent word to the engine-room that the pressure might be reduced below danger-point. Then he called Sawyer, and ordered him to serve out food to the men and make some coffee.

Scarcely had he given this order when the engines stopped working, and almost immediately a man came running forward to the bridge.

'A steam-pipe has burst, sir, in the engine-room.'

Mr. Graham left the bridge and went aft without a word.

The engine-room was full of steam; two men had been badly scalded.

'How long will the repairs take?' he asked Mr. Arnold, who, fortunately, had escaped unhurt.

'Six or eight hours at the least,' replied the second engineer.

'Then set about them at once,' said the lieutenant. 'I have got an anchor down; I believe it will hold, and I think the storm is slackening a bit; but we're in a tight place, Arnold—as tight a place as ever I want to be in.'

Then he went forward again, and took his place on the bridge.

He was right; something of the keen edge and fury had gone out of the storm, the piercing, incessant scream of the wind in the rigging had lost something of its fierceness, but the sea continued mountainous, and the roar of the waves against the cliffs told only too distinctly what would happen were the grapnel-ropes to part or the anchor to drag.

The whole of that terrible night Lieutenant Graham remained on the bridge.

When the dawn broke on the wintry-looking sea, it showed the purple-grey cliffs of Gommera not ten cable-lengths from the stern.

But the storm had broken, the force had gone out of the wind, and the *Kingfisher*, riding at her strange moorings, was saved.

CHAPTER XXXIII.—A SHIP COMES INTO PORT.

WHEN the two boats containing the cable-hands and the officers of the *Kingfisher* found themselves adrift in the fog after the mutiny, the cable-boat took the lead. They had on board, fortunately, an unlit buoy-lamp, and, by the aid of a small pocket-compass which Mr. Toms carried, they made as good a course as possible due south. Next morning, when the fog cleared, they were close up to the north side of Teneriffe.

Here they beached the boat and proceeded on foot across the island to Santa Cruz, where they gave information of the mutiny to the Spanish authorities.

The officers put up at 'Commacio's Hotel,' and the shipping agents of the port got accommodation for the men.

Though the chief steward and Skinner, the donkey-man, were pretty badly knocked about, they were not dangerously wounded, and the wound in the Kipper's shoulder gave him little trouble.

On the afternoon of the fourth day of their arrival at Santa Cruz, Mr. Toms and Captain Sprott were walking on the mole, watching the shipping and speculating on the fate of the *Kingfisher*.

'There's no use talking,' said Captain Sprott. 'If that chap Alvarez hasn't sunk her, the storm has. I am as good as ruined. Oh, don't talk to me! It will all come out at the Board of Trade inquiry. They will say, "Here you have a man missing on the 18th of September; here you have another man missing on the 25th." Why didn't you put into port and hold an inquiry?' That's what they will say. It's so easy for a lot of chaps sitting in a stuffy office in London to say what I ought to have done; I should like to put them in my place, and see how they would have acted. How was I to know that this scamp Alvarez was not Alvarez at all? His credentials were all right.'

'If I were you,' said Mr. Toms, 'I wouldn't bother about the thing. You acted for the best.'

'That doesn't matter a rap,' said the fussy little captain. 'I have lost my ship, I have lost two men, and I have lost those two boys. There will be more row about those boys than all the rest of the affair put together. I shall have to interview their parents, and they will say, "These sons of ours were given into your keeping; why didn't you look after them, and take them off the ship with you?" Take them off the ship with me, and I knocked senseless with a belaying-pin, and bundled like a senseless image into the quarter-boat!'

'I believe the boys will turn up all right,' said Mr. Toms. 'Teddy O'Brien is no fool.'

'That's what cuts me most,' said the little captain. 'This is between you and me, Toms. He came into my cabin before the mutiny and gave me wind of it.'

'Lockhead told me this morning,' said Mr. Toms, 'that O'Brien did the same to him; told him a yarn about two Spaniards he heard talking together at the Hippodrome, in London, and how one of them was Alvarez. Lockhead wouldn't believe it.'

'Neither would I,' said the captain. 'What man in his senses would believe such a yarn out of the mouth of a boy like O'Brien? Anyhow, there the matter stands. I have lost my ship, and I have lost my standing with the company, and—'

'Hallo!' cried Mr. Toms. 'What's this?'

The bow of a white ship had just appeared round the cliff-edge that shelters the harbour of Santa Cruz on the east. Then the whole ship swam into view. It was a steamer going dead slow.

'Toms!' cried the captain, 'am I dreaming, or is that the *Kingfisher*?'

Mr. Toms did not answer for a moment; then he threw his cap in the air, and gave a shout that was re-echoed from the cliffs across the water.

It was the *Kingfisher*, battered and storm-beaten, but right and tight for all that.

(Continued on page 387.)

WILLING HEART AND USELESS HANDS.

A GERMAN Professor had for many years given himself up entirely to learned studies, and by so doing had lost touch with ordinary life. All his thoughts were so given up to scientific research that he did not even notice the decline of his own health, and at length became seriously ill. This enforced a pause in his work at last, but he scarcely understood why he could no longer enjoy study. As he was not married, there was no one to speak of his weakness, and the thought of sending for a doctor never entered his head. One morning, however, he was unable to leave his bed, so his trusty old man-servant, who never spoke except when spoken to, fetched the doctor on his own account.

There was soon an improvement as a result of the doctor's care, but the Professor was forbidden all books, and advised to try country life, since plenty of fresh air and exercise would be his best restoratives. Moreover, the doctor told him that walking, and even mild mountain-climbing, would not be enough, after so many years of inactivity; but that to ensure a perfect cure he should go in for swimming, boating, and all sorts of athletic exercises. The Professor, who hated fashionable watering-places, and was well enough off to satisfy his idea of comfort in his own way, settled down in a little village in the Hartz mountains, and his only thought now was to exercise his body so as to be able to return to his beloved studies as soon as possible.

In this small place there were no schools for riding, gymnastics, and the like; but the Professor, who had a tender heart, wished to let his exercise benefit the human race. He had noticed that the paint on the railings of the little house in which he lived had worn off with time, and thought it good exercise for himself, and an act of kindness to his landlady, to spend a long time in the hot noonday sun in repainting them. But the result was not favourable; he overtaxed his strength, and had such a back-ache from stooping that it took him several days to get over it, while the railings were little improved.

He looked round for something else to do, and remembering that an Emperor of Russia had once chopped wood, he threw all his energies into this form of exercise, intending to provide fuel for all the poor widows in the neighbourhood. As he had no idea how to use a chopper, pieces flew about in all directions, to the great joy of the children of the house, who stood round him and watched with great interest, until a large piece, striking the head of the youngest boy, inflicted a nasty wound. So this occupation had also to be given up.

On one of his excursions in the mountains he met a woman carrying on her back a heavy basket of wood-carvings, under which she seemed hardly able to walk. 'Oh,' thought the Professor to himself, 'that will be a way of developing my muscles, and providing helpful and useful exercise.'

The woman was quite willing to let the Professor carry her basket, and, wondering and amused, watched him as with great trouble he lifted it on to his back. His movements were so awkward and

clumsy that she followed him, laughing, and then sat down by the wayside to rest, intending to overtake him later.

The Professor staggered slowly up the steep path, thinking, with great satisfaction, of the real exercise he was having. But it was harder than he thought, and before long he was thoroughly tired. Suddenly a policeman stepped up to him, stared, and said, 'Where are you going?'

'To the village yonder,' said the Professor.

'To sell those wares?'

'I hope so,' answered the Professor, innocently thinking of the woman's wishes. 'Do you wish to buy some?' And with great difficulty he freed himself from the large basket, rejoicing at the thought of making a good bargain for the woman.

'What is the price of this box?' asked the policeman, without moving a muscle of his face.

The Professor, who knew as much about the price of his wares as an Indian would know about the Prussian Constitution, answered, good-naturedly, 'As it is for you, you shall have it for threepence.'

The policeman laughed, paid the amount, and added, 'Now show me your pedlar's licence.'

'For that you must ask the woman over there,' said the Professor, pointing down the hill.

'The woman has nothing to do with it,' was the reply. 'You have sold me this box, and you must show me your licence.'

'That will do. You have had a bargain—now be off!' said the Professor, losing his temper.

'Sir, I am not joking. Show me your licence at once, or come with me to the magistrate.'

And forthwith the policeman, who was only doing his duty, returned the basket to the woman, who had just arrived on the scene, and told the Professor to follow him.

The latter was furious, and said, 'You will make a serious mistake. I am well known. No one would dream of taking me for a pedlar.'

'Silence!' said the policeman, sternly. 'If you insult me in the execution of my duty, it will add to your offence.'

Knowing it was true, the poor Professor accompanied the policeman, who reported the case to the magistrate. During the recital the Professor could hardly contain his annoyance at his situation.

'Give an account of yourself,' said the magistrate. Luckily, the Professor had some papers in his pocket which gave his name and occupation, and these he put before the magistrate. 'These are all right,' said he, 'but the fine for selling goods without a licence is thirty shillings. Will you pay at once, or shall I issue a summons against you?'

The magistrate was quite right. The Professor had broken the law, though he had not meant to do so. What was there to do but pay?

This was the last straw, and he decided to obtain no more exercise through philanthropy.

Some days after this adventure our friend saw some men rowing on a little river. 'Oh,' said he to himself, 'here is another healthy occupation, and one that only affects me. There is no kindness in it.' So he went straight to the boatman to hire a boat. Boldly he took the oars, and soon had a crowd of onlookers, fascinated by his strange movements,



“ ‘Show me your licence, or come with me to the magistrate.’ ”

as the Professor had never handled oars before, and had no notion how to use them. The boat swayed about, and turned round, but did not advance much; and as the poor gentlemen, who was a little short-

sighted, was absorbed in trying to leave the bank, he lost his balance, tumbled in, and was fished out with great difficulty.

The unfortunate man now acknowledged his



African Schoolboys enjoying themselves.

failure. He had tried hard to obtain exercise in a manner that would make him helpful to his neighbours, or, at least, that would prove beneficial to himself; but, having failed in all directions, he left the place out of humour with the world, and went back to his beloved books, believing more than ever that there lay the only useful labour. Had he learned that no one can help others except in that which they know themselves, he might have given his nation a learned treatise on the subject.

AFRICAN SCHOOLBOYS.

READERS of *Chatterbox* will doubtless have decided that the boys in the illustration above are negroes, but in what part of Africa they live is not so evident. Uganda is their home, and they are not really black, but chocolate-colour.

These particular individuals are all very high-class boys, and the school in which they are boarders, the Mengo High School, is only for such boys. But in their early days, before they joined the school, these young chiefs and princes had to do as David did, herd sheep and goats, or cattle, in the wilderness, and many and varied were their adventures with

lions and leopards.* One savage custom in vogue until lately was reckoned great fun. Boys from one village would arrange a fight with the boys on the next hill, and the captives were very cruelly treated. You know that in Africa the termites, or white ants, throw up large hillocks or ant-hills. The white ants are not fighters, but they have a protecting army of large brown ants with horrible claws, in shape something like those of a lobster. A hole was made in an ant-hill, and the legs of the poor captive stuck in and secured with clay, and there the wretched boy was kept for hours, enduring horrible torture from the bites of the soldier ants, which resented the invasion and partial destruction of their domain.

Cruelty was part of their savage nature. But Christianity and civilisation have changed them. They are rarely cruel to even a dumb animal. It is quite unusual to see them even throwing stones at birds, or robbing nests. In their early days they dressed in little but dirt, but they are now self-

* The photograph above was not taken specially for *Chatterbox*. The natives were photographed exactly as they were seen enjoying a copy of the 1907 volume of *Chatterbox*, by a resident in Uganda, who very kindly sent us the photograph and the following article.

respecting schoolboys. They are clothed all in white calico, though they much like English shirts and vests. Now how do you think their clothing is produced?

When they need a new rig-out, we give each one about four yards of calico, and a needle and cotton, and they sew their own trousers. The long 'kanzus,' or upper garments, older boys are employed to sew for them. Women rarely sew. They sow in another way: they do all the field-work and sow crops, whilst men and boys sew garments.

The scholars have to do all their own washing, and very well they do it; and after this work is over they plunge into a fine open-air swimming bath connected with the English Mission School, and can give points to many English boys in the art of swimming. They dare not swim in the lakes or large rivers, because these are full of crocodiles.

You will notice that some of the boys are very short of hair. That is because they all have their heads shaved every second month.

I wonder what your opinion of African boys is? Possibly you think that they are stupid and only fit to be servants to a white man. But boys in Uganda are quite as clever as most English boys, and certainly as painstaking.

You will wonder what they are doing with *Chatterbox*, for you will have guessed that their language is not English. Indeed, in this group are represented six different nations and languages. Here, then, is a proof of their cleverness. They know their native tongue, and each also knows Luganda, the language of Uganda, in which all the British teaching is done, and which is very curious. For example 'water' is called *madzi*; 'boy' is *omulenzi*; 'good-morning' is *Wasuze otya*; and we have some awful words like *kikyekyakunjagaza* and *nebabagolokokerako*. Just try and pronounce these! But in addition to these languages the boys all learn English, and learn it well too, and many of them correspond with boys in England. They are, therefore, quite able to read *Chatterbox*, which, with similar books, we give occasionally as prizes. They are jolly fellows, and see a joke as quickly and enjoy it as much as a European.

The boy holding the book is a prince, and so is the one on his left, and a third is the young brother of King Daudi of Uganda: he is the one pointing to the picture on the cover. The others are the sons of chiefs, and will in a few years be ruling large districts, and collecting taxes, and acting as magistrates. They have a great liking for Christianity and English teaching, and want to grow up as Christians.

They do not neglect games, and are clever athletes. Football they specially delight in, and compete with great vigour for a cup which the King of Uganda has presented for competition, his own team being the first winners. Perhaps the thing that will strike you as most amusing is the way the boys take holiday. Some of those in our picture have to walk nearly two hundred miles before they reach their homes. Imagine four hundred miles' walking, and only a month's holiday!

A letter lately received from Benjamin Gwavi, the boy on the extreme right, tells of a feast which his chief prepared for them during their last holiday.

The chief is a pupil in the school, and took with him a dozen other boys as his guests. The food prepared for them was twenty-two cows, sixty-eight goats, ninety fowls, one hundred and twenty-five pots of milk, and eight hundred and thirteen large baskets of cooked plantains, many of these being presents from tenants and sub-chiefs to their over-lord. Of course they had visitors to assist, and they were there two weeks; still, they must have eaten well to consume all these. Honour is shown to guests in Africa by the amount of food provided.

C. W. HATTERSLEY.

INSTEAD OF THE SUN.

XI.—INCANDESCENT MANTLES.

WHEN the electric light was discovered, many people thought that gas would soon be superseded as a means of lighting houses and streets. But at the present time gas is used nearly, if not quite, as much as ever, and, by means of a new invention, its light, which used to be yellow and dim by comparison with the electric light, is now as white and bright as the electric light itself. This invention is known as the incandescent mantle.

We are apt to think that new inventions are the result of bright ideas that flash through the brain in a moment, without any apparent cause. But if we only knew the circumstances in which any particular discovery was made, we should usually find that the invention was really only a little step forward from what was already well known, and that very often it was made by a man who was well acquainted with all that had been already done, and was simply seeking to make just one little improvement more. This was true, at any rate, of the discovery and invention of the incandescent mantle.

The light of the incandescent electric lamp is produced, as you will remember, by a charred thread, which the electric current causes to glow. You will remember, too, that this thread is enclosed in a small glass globe, from which the air has been withdrawn. If the thread were heated by the current without being enclosed in this way, it would simply burn up in a moment, just as a lighted cotton thread would.

All substances do not, however, burn up so quickly as this, and it occurred to an inventor, named Auer von Welsbach, that he might, perhaps, be able to discover some material which could be heated by an electric current without burning away quickly, even though it were exposed to the air. He was shrewd enough to see that if such a discovery could be made, the tedious and expensive work of manufacturing air-tight globes and pumping the air out of them would be dispensed with. He made diligent and careful investigations, and success rewarded his efforts. From certain rare minerals, found in Norway and America, he obtained the substances which he required. They gave out a bright, incandescent light when they were made hot, and they burned or wasted away very slowly. The substance now most commonly used has been named *thoria*.

Since these substances became incandescent as soon as they were made sufficiently hot, it was soon seen that it did not really matter in what way they

were heated. It was not necessary to use electricity at all. The heat of a gas-flame would do quite as well if it could only be utilised in a suitable way. And, as nearly every house already had all the pipes, brackets, burners, and other fixtures for gas-lighting, it was worth some effort on the part of inventors to find out a means by which *thoria* and the other new incandescent substances could be fitted for use with an ordinary gas-light, because many people would then be induced to adopt this new improvement, which could be effected at so little trouble and cost.

The first incandescent gas-light which I remember to have seen was produced by a small comb of white, earthy material, which was suspended like a little bridge over the gas-flame. The teeth of the comb hung downwards, and the flame of the gas burning between them made them white-hot, and they gave out a more brilliant light than the gas itself.

The incandescent mantle which is now most in use is somewhat bell-shaped, and it is hung round the flame of the gas, being supported by a slender rod which stands up in the midst of the flame. If we examine the mantle as it comes from the maker, we find that it looks as if it were made of starched or glazed muslin. If we put it in its place on the gas-burner, and bring a lighted match to it, we find that it burns with a rather alarming flame, which soon dies out. The mantle is not entirely consumed. There remains a bell of white ash, so frail and brittle that the lightest touch will break it. We must even put a globe round it to protect it from the draughts of air, lest it should be broken. Yet this frail bell of ash, when it is made incandescent by the lighted gas, glows with a brilliant light, which may be six times as bright as that of the gas alone, and it resists the heat so well that it will not wear out for many weeks or even months.

A few words about the way in which these mantles are made will enable you to understand their peculiarities much better. They are woven or knitted of cotton-thread or some kind of slender grass fibre. A single thread hangs down from the top of the knitting-machine, and is whirled round and round a ring of needles or hooks which loop the thread and knit it into a long sleeve. This is cut into lengths, each of which is dipped into a solution of the *thoria* and other incandescent earths, and afterwards dried. It is then exposed to a flame, which burns away the cotton-thread, but leaves all the earthy materials with which it was saturated, and these form, as it were, a skeleton of the knitted mantle, which is carefully and skilfully worked to the required shape. When this is accomplished, the frail skeleton is dipped in collodion, which, when it dries, makes the mantle stiff and firm enough to bear gentle handling. It is then packed in a box ready for sale. It is the collodion which flames up, when we first apply a light to the mantle, and when this is consumed, the frail skeleton of earthy ash, the true working mantle, is left.

The light of the incandescent mantle, as I have said, far out-shines the ordinary gas-light, and the latter could, indeed, be dispensed with, were it not needed to heat the mantle. The gas-light, in fact, ceases to be of use as a source of light, and becomes merely a little furnace, as it were, in which the mantle is made hot.

W. A. ATKINSON.

ANIMAL CHUMS.

MOST animals are fond of society, and are very unhappy or uneasy when they have no companions. As a rule their greatest longing is for the fellowship of their own kind; but when this is denied them, they will often chum with the oddest of companions rather than endure solitude. Many strange friendships between animals of different kinds have been recorded in these pages.

A few animals display a great liking for man's society, and probably more would show this affection if they were encouraged to do so. It seems to be just those animals which man has to take most care of, or to take most trouble to train, which have the most regard for him, as we see in the case of the dog, who is truly among animals the friend of man. The elephant and the horse, which are both carefully trained for their work, have also a great affection for their drivers. Even the wild animals in 'zoos' and menageries learn to know their keepers, and in most instances have more respect for them than for strangers.

Most of the domesticated animals are simply kept to supply food, or some material which is useful in industry. These animals, being simply fed and sheltered, and rarely trained in any special way, do not as a rule display any special friendship for man. But we often meet with exceptions which seem to show us that, if we cared to train them, they would give us real friendship in return. Lambs, for instance, are often petted for their playfulness, and they quickly learn to follow any one about who is kind to them in this way. When they grow larger, this habit becomes rather tiresome, and every effort is made to discourage it. But I have seen a full-grown sheep follow its owner through the streets of a country town just like a dog. In fact, the man, the sheep, and a young bull-dog frequently took their walks together, and the sheep followed at its master's heels quite as well as the dog. The latter took upon himself the duties of a guardian, and saw that the sheep was not molested by other dogs.

Cats are usually more attached to places than to persons; but they too will often follow their owners for some distance, and there is no doubt that this habit could be strengthened by encouragement, if there was any advantage in doing so. A cat which I once possessed made a great point of taking me home whenever he met me, even at some distance from the house. Often on these occasions he would just walk into the house, and immediately go out again upon his own business. He would turn back, too, if he had only just got out of the house, and even if he were just starting off in a direction opposite to that from which I was returning.

A curious instance of an animal's odd affection for a human being has been witnessed in a village in Kent, where a domestic pigeon made friends with one of the children, and regularly went with him to school, which was a mile and a half away. The pigeon remained in school during school-hours, and did not seem to think it was at all out of place. When the harmonium was played and singing began, the bird took a perch on the master's desk, and assumed the position of a chorus-master.



“The bird took a perch on the master’s desk.”



Milton at Chalfont.

WITH MILTON AT CHALFONT.

'ART comfortable, sweetheart? Let me settle this cushion behind thee. There! that is better! How glad I am I have thee safe here, and far away from plague-stricken London. The very cat is pleased to be here—she is rubbing herself against thy chair, and purring so loudly.'

The speaker was a sweet-faced young woman, looking almost too young to be the wife of the feeble, blind old man she was tending so lovingly.

She was nevertheless the wife of John Milton, though some thirty years younger than her husband, who, by the advice of his friends, had married her as his third wife just a year before. He never had cause to regret this act, for she brought order into a greatly disorganized household, and even induced his undutiful daughters to be somewhat more kind and attentive to their afflicted father.

Milton's blindness had of late years compelled him to give up his post of Foreign Secretary to Cromwell, and he was now totally occupied with literary matters—with the compiling of a Latin Dictionary, and, above all, with the composition of his great poem, *Paradise Lost*.

This poem was all but completed when, in 1665, the Plague visited London and drove all who could afford it out of the city to seek a refuge in the untainted air of the country, and Milton, with his wife and three daughters, had found shelter in a cottage at the little Buckinghamshire village of Chalfont St. Giles, some twenty-three miles from London.

'Thanks, dear love,' said Milton, in answer to his wife, as he dropped heavily into the chair placed for him on the little lawn in front of the cottage. 'I trust we may do well here. It is a pretty box, and though we have not the rooms we had in Bunhill Fields, we have certainly purer air, and country sounds of singing birds and waving trees, instead of the lumbering of the plague-cart. But I must get to work! Have you the manuscript, Anne?' he continued, turning towards a young girl of about eighteen, the eldest of three daughters left him by his first wife: 'Begin with the lines I dictated to you last night.'

'Last night!' replied the girl, pertly; 'you mean this morning, Father. The church clock had but just struck three when you called me out of bed to write down your lines.'

'Well, well! I cannot see the light, and had no idea of the time,' said the poet. 'Begin at once. I would hear how the verses run.'

The girl drew her stool up to the little table on which lay the sheets of closely-written manuscript, and began, somewhat sulkily, to read. She had got no further than—

'In either hand the hastening Angel caught
Our lingering parents,'

when a casement window on the upper story of the old timbered cottage was thrown open, and a young girl leant out, saying—

'Your task is over, Anne! Here comes Master Ellwood!'

'Master Ellwood!' said Anne, throwing down her

sheet. 'That is well! He enjoys reading, and I care naught for such things!' and so saying the giddy girl left her seat, and catching up a little kitten which was playing in the path, she disappeared into the house.

'Ah! that it should be so!' sighed the old servant, who was filling a pitcher at the well. 'My poor master is old and blind, and his daughters leave the care of him to others. 'Twill bring them no blessing to neglect their father;' and she sighed as she bore her pitcher into the house.

Ellwood, who was a young Quaker, was a great favourite of Milton's, and when his nephews, Andrew Marvell and Cyriack Skinner, were not at hand to act as amanuenses, it was Ellwood who was always willing to read or write for the blind man, and who took a genuine interest in the progress of his poem.

This poem, *Paradise Lost*, was now all but finished, and Ellwood had, on the previous evening, taken home the manuscript to read, and now, as Milton heard his approaching footsteps, he looked hastily in his direction with his sightless eyes, and said, eagerly, 'Well, Ellwood, and what is thy verdict?'

'I have read it all,' said Ellwood, earnestly, 'and truly, it is a great work, and one that will hand down thy name for all time. But why stop? Thou hast said a good deal upon *Paradise Lost*; what hast thou to say upon *Paradise Found*?'

Milton made no answer to this, but sat for some time in silent thought.

That remark of the young Quaker was, however, shortly to bear fruit, for the publication of *Paradise Lost*, which took place in 1667, was followed three years later by the sequel, *Paradise Regained*, and Milton always attributed this latter poem to Ellwood's suggestion.

* * * * *

The cottage at Chalfont, the 'pretty box,' as Milton called it, is the only one of the poet's residences which still remains.

It has been bought by the nation, and is kept as a museum, and still looks almost as it did when the poet took shelter in it from the Plague.

It is a two-storied dwelling, built of brick and plaster with wooden beams, and contains nine rooms, some of which are, however, so small as to be almost cupboards.

A pleasant garden surrounds the cottage, and the illustration of the cottage, which we give herewith, was drawn by our own artist on the spot.

It is interesting to remember that it is exactly three hundred years since Milton was born, as existing registers give his birth on December 9th, 1608.

E. A. B.

HOMING BIRDS.

FROM varying points their flight they take,
Yet all the same direction make;
To the same spot their wings repair—
They know their home, their love is there.

Sweet thoughts, fair hopes, all lovely things,
All good desires, O spread your wings;
Like homing birds to me repair,
And know your home, your welcome there.

A SLIGHT MISUNDERSTANDING.

AN organ-grinder had been playing before the house of a quick-tempered old gentleman, who with furious gestures ordered him to be off. The Italian stolidly stood his ground, and played on until he was arrested for causing a disturbance. At the Court, the magistrate asked him why he did not go away when requested to do so.

'Me no understand much Inglese,' was the reply.

'But you must have understood by the gentleman's motions that he wished you to go,' said the magistrate.

With some difficulty, the organ-grinder was made to understand this remark.

'Me think he want to dance,' he answered.

PUZZLERS FOR WISE HEADS.

ANSWER TO PUZZLE ON PAGE 358.

16.—C R A M
R O S E
A S I A
M E A N

THE CRUISE OF THE 'KINGFISHER.'

(Continued from page 378.)

IN a moment the cable engineer and the captain were in a native boat, rowing out to meet the ship.

'She has lost her anchor,' said Mr. Toms, 'and she is looking for moorings. Here's the American training-ship moorings. We will fix her to that.' He stood up and waved an arm to the people on the *Kingfisher's* bridge, and pointed to a black-and-white buoy floating in mid-channel.

They understood. Her engines had ceased working, and, with just motion enough to give her steerage way, she stole up to the buoy. Then a coil of rope came flying into the boat, and Mr. Toms himself made her fast to the buoy-ring. Three minutes later they were on deck, shaking hands with O'Brien and Marley, and being introduced to Lieutenant Graham.

'Everything is safe, sir,' said Teddy to the captain. 'The ship is right and tight, and we have saved the ship's money.'

'We have some prisoners for the Spanish authorities,' said Lieutenant Graham. 'Some of them are wounded—two scalded, owing to the bursting of a steam-pipe. But I am very anxious. I don't see my vessel here. Has no destroyer come into port?'

'Nothing of that sort has been in the harbour,' replied Captain Sprott. 'A Spanish torpedo-boat went out the day before yesterday to search for the *Kingfisher*, and she was blown by the storm into Las Palmas harbour. We had a cable from there last night.'

'We met her, and she boarded us,' replied the lieutenant. 'Well, I must go ashore and telegraph to the Admiralty. Good-bye for the present, O'Brien. I'll see you on shore. I shall stop at Commacio's Hotel, and you and your chum must come and have dinner with me.'

He saluted the captain and the cable engineer, went down the ladder, and was rowed ashore. This

was a most irregular proceeding, for he ought to have waited till the port authorities and the doctor had been on board. But Admiralty telegrams will not stand delay, and the case of the *Kingfisher* was different from that of an ordinary ship.

O'Brien and his two senior officers, followed by Marley, went into the chart-house. They had hardly entered when they were joined by the shipping agent, who had just come off.

Then Teddy began his tale, and his hearers listened, spellbound. He told of their escape in the fog, and the death of the Russian Finn, of the chase to Gommera, and their flight across the island, of their escape in the boat, and how they boarded the *Kingfisher*. Then he described minutely how he and Marley had saved her from the Hamar rock.

Captain Sprott, on hearing this, struck his knee a blow. 'By Jove,' he cried, 'you have saved her, and she's worth a fortune!'

Teddy told them of the great fleet of warships passing, and how they had dispatched the destroyer, of how they had laid a trap for Alonez, or Alvarez, and his crew, of the fight, and then the storm, and how Alonez had swum to the buoy.

'Ah,' said Mr. Toms, when he heard this incident, 'that was a brave man! What a pity he wasn't a good man, too!'

'Yes, sir,' said Teddy, 'I never saw a braver thing done. Mr. Graham said that only for Alonez catching the buoy, and mooring us for awhile, we must have been lost, for it gave us just time to prepare the anchor.'

He then told of the deep-sea anchor business, and the cable engineer, who could appreciate the difficulty of the job, grew enthusiastic. 'If I ever meet that chap on shore,' said he, 'I'll—I'll—shake hands with him, for all his conceit. Heave ahead, Teddy.'

O'Brien finished his tale, telling how the steam-pipe had burst, how they had mended it, how the dawn had shown them Gommera close aboard, and by what a narrow, narrow shave they had escaped a terrible death.

'Well,' said the agent, 'it sounds *more like* a novel than real life, and I must congratulate you, Mr. O'Brien, and your friend, for you have pulled a big thing off as certain as certain.'

'Oh, it wasn't altogether us,' said O'Brien. 'Sloper saved the ship in reality, for if the beggar hadn't shied bananas at us when we were in the dinghy, we should not have had anything to eat, and if we'd had nothing to eat we couldn't have got ashore, or had the strength to make the run we did.'

They were interrupted by a furious jabbering outside. It was not Sloper, but the Spanish port authorities, including the doctor, who had come off to inspect the ship. That evening they all dined together at Commacio's Hotel, and after dinner Teddy had to recount his experiences all over again for the benefit of the company.

The delight of old Mr. Lockhead at recovering the ship's money was only equalled by his horror when he heard how his papers and books had been treated by the mutineers.

'Never mind,' said he, 'I saw them marched through the streets to-night to prison, and that's some comfort,



"A telegram for Captain Sprott."

and two have been taken to hospital, scalded. I am not a vicious man, but all I can say is, serve them right.'

Sloper was also a guest at the dinner, slinking about the floor and begging for nuts. He was had on to the table and toasted, and in the midst of these proceed-

ings the door opened and Mr. Commacio himself, most genial of landlords, entered with a telegram for Captain Sprott.

'It's from Roberts,' said the captain, reading it. 'The expedition is ended and we are to go home and report.'



"The boys fell on their knees, begging him not to kill them."

'When shall we start, sir?' asked Teddy.
'Day after to-morrow,' replied Captain Sprott, 'if
the engines are fit.'

(Concluded on page 395.)

THE MAN-EATER.

From the German.

TWO little boys from the town lost their way in a
dark wood, and had to stay the night in a

wretched little wayside inn. In the middle of the night, they heard voices in the next room. They put their ears to the thin wall, and listened.

'Get the big kettle hot early to-morrow morning. I must kill our little chaps from town.'

The poor boys were frightened out of their wits.

'Good heavens! This man is a man-eater!' one whispered to the other, and they jumped out of bed in their horror, dressed quickly and climbed out of the window. But when they reached the yard, they found the big gate locked, and there was no shelter but the pig-sty. They crept in and waited for the morning. At length they heard a noise in the yard, the door of the sty was opened, and a man appeared with a knife in his hand.

'Now, then, come on, you little chaps. Your hour has come.'

The boys came running out with a shriek, and fell on their knees, begging him not to kill them. The man was quite puzzled to find them there, and asked why they thought he was going to kill them.

The boys said, in tears, 'We heard you say yourself, last night, that you were going to kill us this morning.'

The man replied, 'You foolish boys! I didn't mean you, but the two little pigs I bought in the town a little while ago. I called them my little chaps for fun. That is all you get from listening. What one says innocently is heard by another with mistrust and suspicion, and often enough, as a consequence, brings a lot of unnecessary sorrow and trouble.'

IN SCHOOL AND OUT.

VIII.—THE DORMINSTER SHIELD.

IT was the beginning of the summer term, and two years had gone by since Canbury Grammar School had been electrified by the dynamite plot. There had been many changes. Anderson and Meredith had worked their way into the upper fourth, and Anderson Major had brought glory to Canbury by winning a valuable University scholarship. He was away from the school at present, paying a visit to Oxford, in connection with his future residence there. His place as head prefect was taken for the time by a boy named Peterson, who was not by any means so popular. He was a good shot and a good cricketer, but he did not make a good captain for either the eleven or the shooting eight, because he had an unfortunate way of upsetting his followers by over-fussiness.

One afternoon, while he was in his study with Graham, the prefect who shared it with him, a small boy brought in a bulky envelope which had just arrived by the post.

'Good!' cried Peterson. 'It's the list of entries for the Dorminster Shield. My word! there are enough Rifle Clubs in for it this year. We shall have to buck up if we mean to keep it.'

Graham came and looked over his shoulder and immediately exclaimed, 'Look at that!'

Peterson looked and exclaimed in his turn. Among the names of new teams which had entered for the first time stood 'Willoughby's School, Canbury. Captain of team, William Carter.'

Willoughby's was an endowed school in Canbury, in which a good commercial education was given to those boys whose parents did not care about sending them either to the primary schools or to the Grammar School. The top boy at Willoughby's was offered a scholarship to the latter establishment every year, but Willoughby's always sided with the town in any question of rivalry with the Grammar School.

'Is that the great Bill Carter?' asked Peterson. 'I didn't know he had gone to Willoughby's.'

'Not know he had gone to Willoughby's? Why, he has been there more than a year, and you must have noticed that the kids haven't had a single row with the town lately. He's quite a reformed character, and wouldn't demean himself to play any of his old tricks.'

'Can he shoot?' asked Peterson.

'I don't know, but I don't suppose they would have challenged for the shield unless he could. He never did like being beaten.'

The great event of the year to the Cadet Corps was the shooting for the Dorminster Shield.

It had been left to that town by a retired General, who had lived there a good many years. He had also left the most minute directions in his will for the regulation of the competition. It was open to Cadet Corps and school Rifle Clubs within twelve miles of Dorminster, and the General had tried to make the conditions as difficult as the conditions of real warfare. Each team had to march a measured half-mile, immediately before firing, and each member of the team was to fire separately and be allowed exactly three minutes for his seven rounds. In addition to this, the firing had to be done between the hours of two and four, which for some reason the General had selected as the most difficult time of day for a shooting match.

There were only two Cadet Corps in the neighbourhood, but the shield had, as it was meant to do, brought into existence a large and ever-increasing number of Rifle Clubs. Each team had to put in a score on the Dorminster range during the month of June, and the two teams which did the best competed for the shield at an early date in July. The Grammar School had won it the previous year.

The General had considered that the first test of a good shot was being able to shoot with competitors and spectators watching, and twice already it had happened that the eight which won the preliminary trials most easily came out only second in the finals.

On the 1st of July, as usual, the rival captains received the lists of the results of the June trials, and, to Peterson's delight, Canbury Grammar School stood first. But his joy was damped when he discovered that next to it, and only one point behind, was Willoughby's. If it had been any other team the Grammar School would have been quite satisfied with its position, but during the week that followed, the Cadet Corps seemed to have only one remark to make, and that remark was: 'We must beat Willoughby's.'

Peterson was the keenest of all, and unfortunately he gave his seven followers no peace. He spent his time in explaining to each one his weakest points,

till, at last, the boys began to wonder whether they had any strong ones.

Dorminster was eight miles from Canbury, and as one of the stations was on a branch and the other on a main line, the trains were inconvenient, and the rival teams thought it best to drive across country in brakes.

The boys of the Cadet Corps looked very smart in their neat khaki uniform, and Mr. Davidson surveyed them with satisfaction as they mounted their brake. He was very proud of his school, and considered that there was no nicer set of boys to be found anywhere. As they drove past Willoughby's, the rival conveyance stood outside it, and the team in grey felt hats, with bandoliers slung across their shoulders, were waiting on the steps for a late-comer.

There were plenty of spectators behind the range when, just before two o'clock, Peterson, as in duty bound, delivered the precious shield into the hands of the Mayor of Dorminster, with many fervent, though unspoken, hopes that it would soon be hanging in the school-hall again. Punctually at two o'clock the Grammar-school boys, who were to fire first, started for their half-mile march, and, at ten minutes past the hour, Peterson began the match with a bull's-eye. During his seven rounds he succeeded in piling up thirty-three points—the best score he had ever made—and it was with a feeling of satisfaction that he turned to make room for Meredith, who came next.

'Take your time over your *first* shot,' he said; 'don't hurry it.'

And Meredith, in his anxiety to obey his captain's orders, spent so long in aiming his heavy rifle that his hands began to shake with nervousness, and eventually he missed the target altogether. Peterson gave vent to an impatient 'Tchah!' which finished Meredith. He did not again miss the target; but, whereas he had been reckoned on for a certain twenty-seven, his score finished at seventeen.

That was the beginning of the demoralisation of the team, and though, at a hint from the Colonel in charge of the range, Peterson refrained from further interference, the score at the end stood at a hundred and seventy-six, instead of the two hundred and eleven that had been made at the trials.

At the close the Grammar-school boys turned round to make way for their opponents, and found, to their surprise, that the Willoughby boys had not yet made their appearance at the range.

'Where can they be?' asked the Colonel of Mr. Davidson, who was standing beside him.

'I can't imagine. They were just going to start when we left Canbury ourselves. Hadn't we better send some one on a bicycle to see if they have met with an accident?'

A messenger was promptly dispatched, but, as the minutes slipped by, he did not return, nor was any sign to be seen of the missing team.

All eyes were fixed on the Canbury road, which wound up a hill opposite the range, and, as a quarter to three struck on the church clock in the distance, then three, then a quarter past, the Colonel began to fidget with his watch.

'If they don't turn up by the half-hour,' he remarked to Mr. Davidson, 'they will scarcely have time both to march and fire, and the shield will go to your boys.'

'Oh! but they can't possibly take it,' said Mr. Davidson, 'after the disgraceful score they made to-day.'

'Still, they earned it at the trial; and it seems as if they were going to have it,' answered the Colonel, as the hands of his watch went on relentlessly.

'Half-past three!' said the Colonel; and at that moment the crowd divided in an unexpected place, and a small, hot, and panting boy, in a grey felt hat and bandolier, dashed on to the range. He plodded breathlessly up to the Colonel, and saluted.

'Willoughby's team reports itself to fire, sir!' he gasped, and then, without another word, turned round, and, with as martial a tread as he could assume, started for the red flag which marked the turning-point for the half-mile march.

The Mayor would have spoken to him, but Mr. Davidson interposed. 'Don't stop him,' he cried, for goodness' sake! He can only just begin in time as it is.'

Three minutes later a second, and rather less breathless, figure emerged from the same woods, and at five-and-twenty to four, Carter and the rest of his team marched on to the range as calmly as if nothing unexpected had delayed them.

Their last round was fired just before the town clock struck four, and Willoughby's team, in spite of the low scores of its two first members, had won the Dorminster Shield by one point.

When the cheers of the crowd had subsided, the Colonel called Carter up to him and asked for an explanation.

'We were rather late in starting, sir; so the driver took us a short cut through some lanes, and we were overturned into a ditch. Mr. Bruce, the master, who was with us, was the only person hurt; but it took us some time to get him into a cottage, and then the driver went back to Canbury for a doctor. Mr. Bruce wouldn't let us stop with him, so we marched across by a path through the woods. Then, when I found that we couldn't all get here in time without hurrying, I sent on the two worst shots, so as not to spoil the score more than could be helped.'

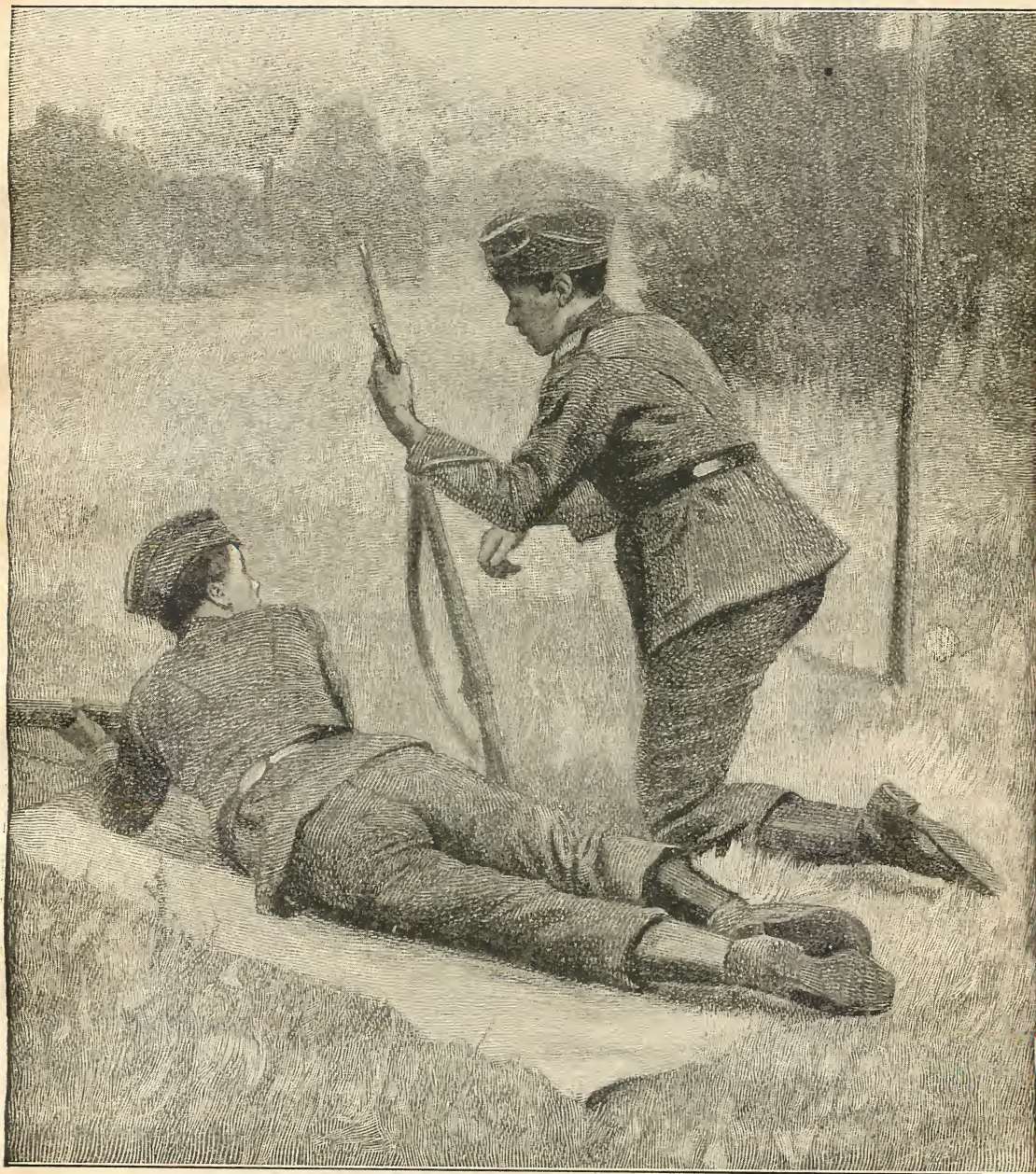
'A lesson in managing a team, eh, Peterson?' said Mr. Davidson to his head prefect, who was standing next to him.

'Yes, sir,' said Peterson, humbly but honestly. 'I should have hurried them, and put them off altogether.'

But a still further excitement was in store for the Grammar-school boys, for when Mr. Davidson went forward to congratulate the winning captain on his well-deserved victory, he added, 'I'm glad to know, Carter, that next year you will be firing on our side, instead of against us;' and they learnt, to their astonishment, that 'Bill Carter' had gained one of the annual scholarships, and that in September he would become a Grammar-school boy.

'And he will be in our class, too,' said Meredith to Anderson when they began to realise the significance of the news.

A. KATHARINE PARKES.



“‘Take your time over the first shot,’ he said.”



“‘Let Stokes fetch him down.’”

A DRAWN GAME.

Founded on Fact.

ALL eyes were on the distant church clock; it wanted fifteen minutes to six. The home team were in dire extremity, working to bring the score up to winning point: twenty more runs would do it. In the silence that reigned as a new man turned out to replace his comrade who had just been bowled, all eyes were on the clock.

Then there came a moment when all eyes were *not* on the clock, for the new man smacked a ball to the boundary, and every eye was on the panting fielder who raced after it. But, as here and there a spectator shot a glance towards the clock again, sounds of surprise and anger arose. The hands of the clock had been put back, during the shouting, to five-forty!

'A trick!' 'Foul play!' Above these cries the rival captain was heard to shout angrily: 'I give up the game. We agreed to play strictly by the clock, and the beggars go and tamper with the time! Come along, you fellows—we won't play with cheats!'

The indignant captain was actually walking off the pitch, his team beginning to follow. The home boys gasped and stared, confounded by the incident; then, as if swayed by a common impulse, the whole crowd of them broke away in a mad stampede for the church tower. Fences and ditches intervened, and forbidden patches of cultivated ground, but they had no care for these things at the moment. The honour of the school was at stake; they must discover at once whether the occurrence was due to accident or design.

Stokes, the school captain, was stammering as he pelted along at the head of the rush: 'If the thing's an accident—we may be in time to—catch the Bonfield captain—and tell him. Tell him before he gets away—and spreads the news!'

'Suppose it is a trick?' gasped Jameson, running alongside him.

'We will lynch the rascal!' declared Stokes desperately, 'whoever he may be. He's sure to be on or near the spot. Come on!'

The old sexton, lazily and dreamily plying his scythe in the churchyard, looked up in amazement as a score of boys charged and climbed the wall simultaneously, and charged past him. They were deadly silent in the churchyard, but at the foot of the tower voices broke out again.

'Yes! The door's open. Some one's up aloft. After you, Stokes!'

Stokes was thrust up the stair first, by Jameson, as being in a mood likely to do justice to the fault when he came in contact with the offender. After him the others swarmed. It was a case of 'single file' as they climbed the narrow stair with its worn stones and uncertain foothold. When several of the climbers had bumped their heads against the roof, some one thought fit to call out, 'Mind your heads!' Presently they burst on to the floor of the belfry above.

As Stokes emerged on this landing-place he shot a hasty glance round: a tall and almost perpendicular ladder led up to the top of the tower. He was already six steps up, climbing like a cat, before Jameson had found the stair below. Jameson halted

at the foot of the ladder, pushing back the crowd behind him.

'Stand back,' he said. 'Let Stokes fetch him down. Is anybody up there, Stokes?'

There was considerable hubbub in the belfry chamber, but above it all Stokes was heard shouting down: 'It's Mason—Mason Minor! Come down with me, you wretched sneak' (smack! smack!), 'and face the Head—and face the school—and face the Bonfield captain! And if there's anything left of you by that time, I will go without my supper to-night and eat you! Come on, I say!'

'Chuck him down, Stokes, old chap!'

'No, don't chuck him down, Stokes; let him down gently—we want to receive him whole and sound.'

Ten pairs of outstretched hands received the unlucky Mason as he descended, and bore him bodily down the stair, as if he were a bundle of hay. Out into the churchyard and over the wall they hustled him. In the field beyond they spurred him to a fast gallop, pulling at his sleeves and pushing him on from behind. Unceremoniously they thrust him through the last fence into the cricket-field, where the dazed boy rolled into the presence of the Head.

'What—what have I done?' he panted, tears in his eyes, as he stumbled to his feet. He felt the Head to be as a rock against which he might set his back and face the angry circle round him, but the master seized and swung him round.

'Yes, what have you done?' he asked severely.

'Nothing, sir!' answered Mason in a shrill tone of indignation and alarm.

'Were you up in the tower?'

'Yes, sir. Searching for owls' eggs—for my collection, sir.'

'And you tampered with the clock?'

Mason flinched visibly, and the crowd broke into a cry.

'I—I—' he stammered. 'I stopped to look at the works—as I went by—'

Stokes took this as equal to a full confession, and a minute later was speeding over the field to overtake the rival captain—to tell him the culprit had been found, and would undoubtedly be punished, and that the honour of the school might be regarded as still intact. But to his surprise he found the Bonfield captain rolling up his sleeves, preparing to take the field with his team again.

'Why, what's happened?' he exclaimed, gaping as he came up.

'Ha, ha, ha!' the Bonfield captain roared, bending to slap his knees. 'You have a feathered friend on your side, sir!'

'Feathered friend!' echoed Stokes, wondering. 'We have a donkey on the premises, and—one of the fellows is allowed to keep pigeons—'

'Ask this town boy over here. He saw what happened. Hi, boy! Come here, and tell what you saw.'

A boy ran up—two or three boys, in fact, each eager to relate what he had seen: 'Please, sir, I saw it, and Jim Smith, he saw it as well. When you were all shouting and watching the other fellows running, the pigeon flew up on the face of the clock, sir. Yes, sir, it lighted on the big hand, and the big hand dropped down full five minutes back; then the pigeon lost its balance and flew away. It was all

done in a second, sir. I saw it, and Jim Smith, he saw it—but everybody else was shouting——’

Stokes’ face widened in a huge grin as he turned to his rival. ‘We cannot play any more to-day, anyhow,’ he said. ‘We will call this a drawn game.’

‘Right you are!’ cried his rival readily, extending his hand. ‘Only—mind you shut up the pigeons before the match begins, next time!’

That night it was wonderful how suddenly large Mason Minor’s collection of eggs grew. Everybody seemed to be bringing him specimens by way of atonement for their rough handling of him.

THE BOOK’S APPEAL.

I’M full of ancient wisdom, Tom,

Do come and look at me:

I’ve tales about the ancient kings,

And sailors on the sea;

And those who turn my pages o’er

Will find, to their delight,

A record of the doughty deeds

Of many a doughty knight.

Now, Master Tom, don’t turn aside

To books of less account;

You’ll find they cannot teach you facts

To any great amount.

Some pictures? Yes, no doubt they have,

And easy stuff to read;

But then, remember, ‘easy stuff’

Is not the stuff you need.

Just try me for a little while,

’Tis really all I ask,

And you will find my golden lore

Is truly worth the task.

The more you know, the more you feel

That—— There! He will not stop.

Good-bye! He’s gone, the idle boy,

To spin his idle top.

Well, well, I’ve known it so for years—

For many years, you see—

Since I am what professors call

An ancient history;

And when this Tom has older grown,

I fancy he will turn

To read what I’m prepared to teach,

And he will want to learn.

THE CRUISE OF THE ‘KINGFISHER.’

(Concluded from page 389.)

CHAPTER XXXIV.—THE END.

IT was raining and blowing up in Cumberland. It had been raining all day, and now at about seven o’clock, dinner having been cleared away at the vicarage, old Mr. Marley and Captain O’Brien sat playing a game of chess.

‘How’s that?’ asked the captain triumphantly, placing his queen, which he had just recaptured, on the board.

‘That,’ said the vicar, ‘why, I believe that’s mate.’

‘I believe so too,’ replied the other, tapping the ashes out of his pipe and refilling it. ‘Have another game?’

‘I don’t think I will just yet,’ replied Mr. Marley, as he listened to the rain dashing against the window. ‘I’m thinking of those boys. Roberts’s letter said the *Kingfisher* ought to arrive this morning, and that they would telegraph when they left London. No telegram has come, and what with that awful storm in the channel and the wreck of that steamer on the Dutch coast, I feel nervous.’

‘They are all right,’ said Captain O’Brien. He felt nervous himself, but he would not let his companion see it. ‘She’s a good boat and Sprott’s as good a man as ever walked the deck of a ship. Besides, they were past Ushant before the storm broke.’

‘I know,’ replied the old gentleman, ‘but I feel uneasy.’

They sat over the fire, talking of one thing or another and listening to the wind and rain.

Eight o’clock had just struck, and Mr. Marley was in the act of putting an extra lump of coal on the fire when the sound of loud laughter mixed with shrieks from the kitchen made him drop the lump of coal and jump to his feet. Before either he or his companion could cross the room, however, the door burst open and Dick, followed by Teddy with Sloper on his shoulder, broke into the room. They had come by the last train and had not telegraphed, because they wanted to give their parents a surprise. It would be hard to picture the scene that followed or tell who was most delighted. Dinner was brought back, or the remains of it, and whilst the two boys, who were as hungry as hawks, stuffed themselves, the two old gentlemen plied them with questions, Sloper meanwhile sitting on the hearthrug and warming himself at the fire as if the house belonged to him.

The boys had agreed to say nothing about the salving of the *Kingfisher*, but just tell the story of the cruise and let the fact come out naturally. So, when they had finished dinner, Teddy took his seat on the hearthrug and began his yarn, Marley putting in his oar here and there when he forgot things.

‘Well,’ said Captain O’Brien when the story was finished, ‘if that doesn’t beat anything I ever heard, call me a Dutchman!’

‘And the beauty of the thing is,’ said Teddy, ‘that the Roberts aren’t going to dispute our claim for salvage, or take it into the Admiralty Court; they are going to have the ship assessed and pay us our salvage-money without any bother.’

‘You will get at least a hundred pounds, I suppose?’ said old Mr. Marley.

‘A hundred!’ cried Teddy; ‘why, it may come to over twenty thousand pounds.’

‘Twenty what?’ asked the old gentleman, who was slightly deaf.

‘Twenty thousand,’ replied Teddy.

‘He’s perfectly right, Marley,’ put in Captain O’Brien. ‘It was a valuable ship. My goodness! but it’s almost unbelievable.’

It was quite unbelievable to old Mr. Marley, or, rather, he absolutely refused to believe it, and got quite irritable when they pressed the point and tried to explain the law regulating the matter.

‘Well,’ said the captain to divert the conversation, ‘you haven’t told us what happened to the destroyer. Did you hear any more of her?’

‘Oh, yes; she came into harbour the morning we



"Dick, followed by Teddy with Sloper on his shoulder, broke into the room."

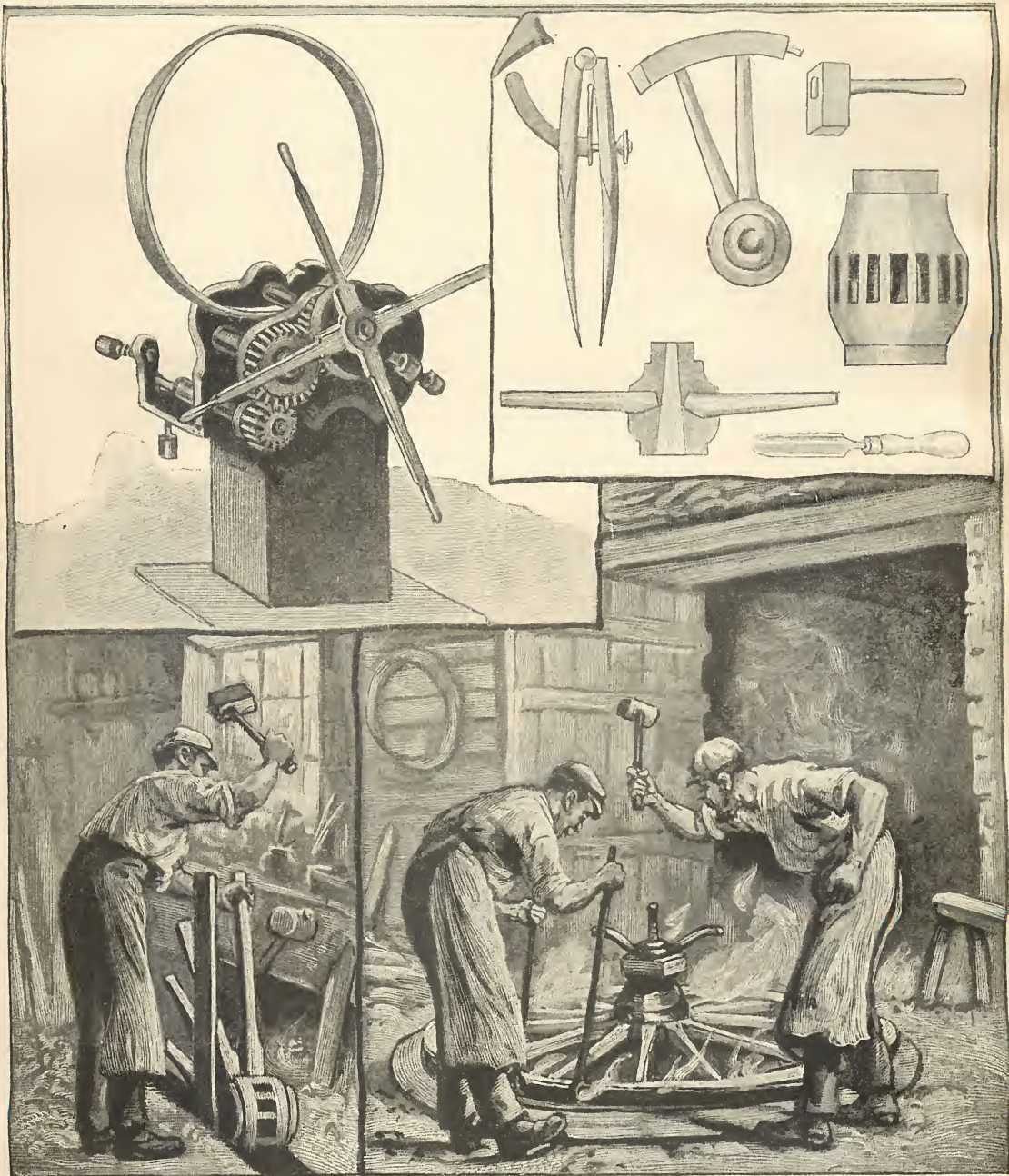
left. She had a breakdown of the machinery and was driven ever so far out by the storm, and she came in in tow of an old oil-tank. I made friends with Greg. He's a very decent fellow.'

'I'm glad you did that,' said Mr. Marley, and Teddy grinned.

He did not explain that he and Greg had 'made friends' with their coats off in a back-yard of Com-macio's Hotel, and that Greg had lost a tooth, and he, Teddy, had gained a black eye in the process.

H. DE VERE STACPOOLE.

THE END.



Tire-making Machine.
Fitting the Spokes.

Wheelwright's Tools.
Putting a Tire on.

A CART-WHEEL.

THERE are many little points of interest in an ordinary cart-wheel. It is made of wood, strengthened in certain parts by bands of iron. Leav-

ing the iron out of consideration, the wheel is made up of pieces of three distinct shapes. There is first the nave, or boss-shaped centre, which fits upon the axle. Next, there are the spokes, which are inserted into the circumference of the nave. And, lastly, there

are a number of curved pieces, known as fellies, which are fixed upon the outer ends of the spokes, and combine to make up the rim or circumference of the wooden wheel.

All these parts are made and fitted together by a cartwright or wheelwright. The nave is turned in a lathe, and the holes for the spokes are cut out with a chisel. The spokes, after being sawn to the proper length, are shaped by a tool called a spoke-shave, which is really a peculiar kind of plane, and takes off the wood in shavings. The fellies, of which there is usually one to every pair of spokes, may be cut with an axe having a curved blade, or they may be bent from straight pieces of wood.

We can readily understand that great skill is required to get the spokes of a wheel properly spaced, and to give each felly the right curve, so that, when they are united, they will form a true circle. But the wheelwright's skill is greater than we think it is. If we walk behind a cart, and view the wheels edgewise, we shall see that nearly always they are not quite flat, but slightly hollowed or dished, like a saucer. The hollow side of each wheel is turned away from the cart, so that the top part of the wheel does not rub against the side of the cart. And we shall also notice that, though the wheel seems to be tilted a little from its perpendicular position, it nevertheless rests flat upon its rim. These are little details which add much to the difficulty of the wheelwright's work.

The wooden rim is strengthened by a hoop or tire of iron. The tire is made from a straight bar of iron. Very often the village wheelwright buys the tire ready for putting on in its place. But if we can find a workman who bends his own tires, we shall see that he either uses a kind of lever or a machine which contains a number of rollers. With the lever he bends the bar little by little as he draws it through a sort of staple or vice which holds it down. The machine with the rollers is, however, much more convenient. There are three of these rollers set horizontally, and they are turned by means of a handle. The bar is drawn under the middle roller and over the two end ones, and the rollers are so arranged that the bar must be bent as it passes through the machine. By setting one of the rollers nearer to or further from the others, the bar may be bent more or less, as may be required.

The ends of the bar, which touch each other when the tire is bent, are made hot in a smith's forge, and are hammered together until they unite. At intervals along the tire, holes are made through the metal to receive the nails or spikes which help to fix it on the fellies.

The tire is now ready to be put upon the wheel. There are various ways of doing this, but in most wheelwrights' shops nowadays the wheel is laid on a circular platform a little larger than itself, covering a small tank or well. In the centre is an opening large enough to take the hub of the wheel, and through this projects a screw, on which the wheel is placed and firmly fixed. In the meantime the tire is placed in a blacksmith's forge, and an assistant blows the bellows to make it hot. When it is properly heated, the two men take up the tire with their iron tongs, and carrying it out to the wheel,

they deftly drop it upon one side of the rim. It is a tight fit, and, in order to make it go on all round, a lever is used to force it down. All the while it is singeing the wood, as we can see by the smoke which rises. It sometimes happens that the lever forces the tire too far, and it projects below the rim. When this is the case, the wheelwright takes up an iron bar, having stout, fixed jaws at one end, and placing the jaws over the tire and rim, he draws up the bar, and, by sheer strength, forces the tire into its place.

As soon as the tire is truly placed in position, a chain is released, and the platform, wheel and all, sinks into the tank of water underneath. As the iron cools, it not only ceases to singe the wood, but it also contracts most powerfully. It draws up all the joints of the wheel, forcing the spokes into their sockets, and the fellies close against each other, and it takes a firm grip of the rim, so that nothing will shake it from its place. When it is quite cool, it is made still more secure by iron spikes, which are driven through the holes of the tire into the wood of the fellies.

ROUND THE CAMP-FIRE.

VI.—BOBBY OLDFIELD'S 'GOOD DEED.'

'PERHAPS you fellows,' said Bobby one evening over the camp-fire, 'will not believe it, but I once performed an action of which I felt proud.'

'Then I wonder we have not heard of it long ago,' said Ralph, laughing.

Bobby heaved a sigh. 'It is ever thus,' he said, with much solemnity. 'The companionship of inferior minds has taught me that only the weaker points in a man's nature are recognised by his friends; the good in him is disbelieved. It is very sad. However, here is my tale; you shall judge whether you have not associated, unawares, with a very noble fellow.'

I forget whether I have ever mentioned to you my love for stalking black-game and capercailzie in the spring. I was at Ostermanch, a village not far from Lake Ladoga, one springtide, passing a week among them. I had spent several nights in stalking the former birds, and the keeper, Spiridon, begged me to give the black-game a turn. 'I have made you a beautiful little *shalashka* scarcely a mile away,' he said: 'it has stood for a fortnight, and the black-cock are used to it—they sit and crow within ten yards each night, scores of them.'

I agreed. 'Show me exactly where it is, and I will pass this very night in it,' I said; and Spiridon having shown me the *shalashka*, standing in a small, open glade in mid-forest, I sallied out at midnight, little dreaming that I was about to pass a night of adventure varied enough to make one 'sit up and think' for a month of Sundays.

I did not take Spiridon with me to the *shalashka*, which is a little conical hut made of pine-branches—a tent-shaped structure which can be run up in half an hour, and in which one man, or even two, can lie comfortably. The spaces between the uprights are

filled with smaller pine-boughs. Presumably the black-cock mistake the hut for a curiously-shaped tree, for they come close to it in order to challenge and battle with one another, without fear or suspicion, so that the sportsman concealed within can shoot them at pleasure.

I did not take Spiridon, because the rascal had fallen asleep on a former occasion, and had then snored so loudly that I am certain his snoring kept the birds away, and I was disappointed. I told him my decision.

'You need not come with me, Spiridon; you can do your snoring at home to-night.'

Spiridon burst into loud laughter. 'Well, well,' he said, 'the night is meant for sleep.'

So I sallied forth alone, and Spiridon saw me off, and, indeed, accompanied me a little way through the forest.

As we walked through the ghostly trees at midnight, a sudden noise in the distance caused us both to stop and listen.

'Wolves!' exclaimed Spiridon under his breath. 'I had an idea they were about. A man at Toxova had a lamb stolen last night. He said he saw their tracks in a patch of snow left unmelted in the forest.'

The news interested if it did not actually excite me.

'If they should come near the *shalashka*,' said Spiridon, grimly, 'I shall feel glad that I am sleeping at home.'

'You old coward!' I laughed. 'You were always afraid of every animal bigger than a hare.'

This was true, for Spiridon, though a splendid keeper, was strangely nervous when it came to hunting lynx, wolf, bear, or even elk, and many were the laughs we enjoyed over his weakness.

On these night expeditions I invariably carried a couple of cartridges filled with slugs, in case of encountering any larger beast than I had actually come to find. If only these wolves would really pay me a visit in my *shalashka*, I thought, they would have reason to be sorry.

'You can go back now, Spiridon,' I said. 'Take care the wolves don't catch you on your way home.'

'There is little danger,' Spiridon answered: 'they are far away. The *shalashka* is half a mile from this spot, straight for that big star.'

I dispatched Spiridon homewards. The wolves were howling in the distance, and I observed that the keeper quickened his steps as he heard them. I could hear him break into a run when one of the brutes—hungry, doubtless—uttered a howl louder than the dismal cries of his companions.

I should not like to say how long I walked about in that belt of forest before I found the glade in which stood my little shelter. I think I must have wandered for an hour, while the howling of the wolves came from time to time nearer, then again seemed further away. Right glad I was when, finding myself at the edge of woodland and in the open, I realised that I had struck the square half-mile of boggy moor which I had so long sought in vain.

I found the hut, and, displacing a few boughs in order to enter, scrambled thankfully into it, taking

care to replace the boughs, and so close the gap after me.

There was a heap of hay placed in the corner of the *shalashka*, and, having spread this upon the bare ground, I lay down in luxury, and, covering myself with the sheepskin rug which I had brought with me, settled down to listen with deep enjoyment to the sounds of the forest, which would gradually awaken as the night wore onward towards daybreak.

The black-cock would not arrive, I knew, until between two and three o'clock in the morning. There were many denizens of the forest who would declare themselves before that—not counting the wolves, who would howl on unceasingly until something definite engaged them, when they would stick strictly and silently to business.

The willow-grouse would probably be the first to break the silence; then the frogs would begin, and the cranes, in the marsh, would set their voices travelling through the air until a man listening from many a mile away might hear them.

Then the snipe would begin to whirl overhead, darting to and fro, in order that his beady-eyed mate, watching somewhere upon the earth, might admire his marvellous skill on the wing, and the curious baa-like sound that he made in the rapid turns and zigzags of his flight.

And then the black-cock would arrive in the dusk of early morn; they would come like knights to the tourney-ground, thirsting for battle. Each would arrive with loud wing-beating from his sleeping-place, would alight with a rustle and thud upon the ground close to my watching-place, and would begin without an instant's pause to challenge the world to conflict.

'*Choo-wish!*' he would cry, and again '*Choo-wish!*' and then he would begin to croon like an overgrown wood-pigeon in dear old, far-away England.

Then an enemy—a rival—would hear, and come swooping from the forest, thirsting to take up his challenge. He would alight close to the first-comer, and would cry, as he had cried, '*Choo-wish!*' which ought to mean something like 'You rascal! I heard your boasting. You are a liar and a thief' (and so forth), 'and I am come to teach you a lesson.'

But meanwhile neither bird nor beast stirred, except that occasionally a howl from the hungry wolves, still far away, broke the silence. I lay, warm and comfortable and happy, expecting nothing more exciting than the delight of hearing and seeing all that the beginning of a new day should have in store for a careful observer. How little I dreamed that even now matters were ranging themselves for a surprise.

'Thank goodness!' murmured Ralph, sleepily. 'I was beginning to wonder whether you were ever coming to the point. What about that good deed? Poor old Vandeleur is fast asleep.'

'No, I'm not,' said Vandeleur. 'Bobby's wound up; let him tell his story in his own way. You are doing it rather nicely, Bobby. I like your picture of midnight in the forest in the spring.'

'Thanks,' said Bobby; 'I'm a bit of a poet now and then. Ralph can't appreciate that kind of thing. Well, I'm just coming to the adventure.'

(Continued on page 402.)



“‘Wolves!’ exclaimed Spiridon under his breath.”



“He respectfully told the Field-marshal he must leave.”

FIELD-MARSHAL SUWARROW.

SUWARROW was one of the most famous of Russian field-mmarshals. He flourished at the end of the eighteenth century, and rose from the ranks to his high position.

He was a small man, and sickly in his youth, but grew strong by his simple and abstemious mode of life. He always slept upon straw, and even when he was a General, his whole wardrobe is said to have consisted of his uniform and a sheep-skin.

He was all through his career a most strict disciplinarian and never overlooked any neglect or insubordination amongst his men; but he was equally severe with himself.

For instance, he gave orders to his old servant, Tickinka, who was groom, valet, cook, and everything else to his master, to watch him at meals, and if he thought he was taking too much, either of food or drink, Tickinka was to bid him leave the table.

Tickinka did as his master bade him, and on more than one occasion he came up to the Field-marshal and respectfully told him he must leave.

The Field-marshal would turn round and ask gravely, 'Whose orders are these?'

'Field-marshal Suwarrow's orders, your Highness,' the old servant would reply.

'Ah! Field-marshal Suwarrow! He must be obeyed!' and so saying the Field-marshal would get up and leave the table.

ROUND THE CAMP-FIRE.

VI.—BOBBY OLDFIELD'S 'GOOD DEED.'

(Continued from page 399.)

I DON'T know how it was, but I suppose the general aspect of peace and silence had so soothing an effect upon me that I yielded to a natural feeling of drowsiness, and fell fast asleep.

I cannot tell how long I lay asleep; a loud noise awoke me very suddenly. I started into a sitting position, bewildered with sleep and startled.

My senses returned to me almost instantaneously, and I recognised the sound. It was the morning call of the willow-grouse. But as I laughed, realising what it was, I suddenly realised something else also.

A sound different from any which I had expected to hear: the undoubted patter of a human footfall; the sound of a man running and panting as he ran. What could be the meaning of this? Could he be Spiridon, bringing bad news of some sort from St. Petersburg, summoning me—

The man, whoever he was, must be quite close at hand. It was still nearly dark, and it was hard to see anything far from the *shalashka*: but it seems that the man crossed the open space, making straight for my hut.

It must, I concluded, be Spiridon, who alone should know of the existence of the *shalashka*.

Straight as an arrow he came. He reached the hut, and tore frenziedly at the branches. He made an opening, and fell, rather than stepped, inside.

'Is it you, Spiridon?' I said, trying to peer into his face.

The reply was a cry of fear, or dismay.

'Who are you? Who are you?' some one gasped, seizing me. 'Tell me quickly, or—'

'Let go!' I cried, for the man had caught hold of me so tightly that his grip was unpleasant. 'I am not going to hurt you. I am an English sportsman waiting for black-cock—'

'Thank heaven!' the mysterious new arrival said.

'I was afraid you were— Stop! We must close the gap quickly. They are after me!'

'Who?' I asked. Was this a madman? I sincerely hoped not.

I felt in my pocket for a match. The man was frantically closing up the gap he had made in order to enter the *shalashka*.

'Who do you imagine to be after you?' I repeated.

'Imagine! There is no imagination!' he replied. I fancied I could almost hear his teeth chatter with fear as he spoke. 'The wolves!'

I struck a match, and had a good look at my uninvited guest. He turned, and, shading his eyes with his hand, glared at me. He was a smallish, good-looking man, dressed respectably in black astrachan cap, and a coat trimmed with the same fur. He looked, however, pale and ill, and his eyes wore a frightened, hunted look, which caused me once again to wonder whether I had to deal with a lunatic. The match went out, and we were left in darkness.

'You are satisfied that you have nothing to fear from me?' I asked.

'Yes. I do not know you. You certainly look like a foreigner; besides, I do not see how you—if you were one of them—could have known that I might possibly be found in this *shalashka*. No man in this world has seen me here.'

'I assure you,' I said, 'I do not know you, and cannot conceive what you are doing here, unless you are a poacher.'

'A poacher! I have more important things to think of than poaching. Stop! Listen! Do you hear them?'

'Whom? Are there men after you? Are you pursued?'

'The wolves—the wolves! Yes, men are after me also, worse than wolves; but at this moment I am pursued by wolves. Are you armed?'

'Of course I am. I came here to shoot black-cock.'

'Thank Heaven! Yet I pray we may not have to shoot, for that might show my whereabouts to those who are anxious to find me. There, listen!'

I listened. Quite distinctly I caught the sound as of the pattering of many feet. Suddenly, a wolf gave tongue, for all the world like a hound excited when upon a hot scent.

'They are upon my track,' said my companion. 'I spent the day, yesterday, in a barn four miles away, and, as I came along to-night towards this *shalashka*, they somehow struck my track.'

'You are safe now,' I said, anxious to reassure the poor fellow. 'Are there many?'

'From the noise they made, I should say a dozen or more. Not a large pack, but quite enough of the brutes to be dangerous.'

We were both standing with our faces to the sides of the *shalashka*, trying to peer through the twilight. There was nothing to be seen.

'Listen,' said the stranger, whispering, 'they have stopped. They know I am here. They are standing round. I can hear their panting!'

It was, indeed, sufficiently plain when one listened.

'Why,' I said, 'they seem to be on all sides. We are surrounded. Are you quite unarmed?'

'I have no revolver. A knife, that's all.'

'That will be useful, if they should attack us, which I do not consider likely. They would need to be starving before they would venture to push through the pine-boughs.'

'Yes, but they have been known to do this very thing. I am glad that you have a gun, though, for the reason given, I trust you may not have to shoot. Possibly I may tell you more when it is quite light. Judging by the glimpse I had of you, you may be trusted.'

'Thank you,' I said, with a laugh. 'By-the-bye, you might confide in me so far as to explain how it is that you came to this *shalashka*?'

'I came so hurriedly because of the wolves, just now; but I was coming here, in any case. I come every night.'

'Indeed! Why?'

'In order, if possible, to avert starvation by killing a black-cock. In a word, I have had three. Each night I have watched like a cat at a mouse's hole. I have left a space among the pine-boughs, and when two of the birds are occupied in fighting I have pounced upon them. Sometimes they have fought within a yard of the *shalashka*, and then it was easy to catch one.'

'And you have been absolutely dependent upon this chance food for your support?'

'Yes. I dare not go near a village—no nearer than a certain outlying shed which I have found. I am trying to work round back to Wiborg, which is my home. I am a Finn, not a Russian.'

'You are wanted for some political offence?'

'If it is an offence to speak as a Finn at a Finnish meeting, then I must admit an offence. I cannot help that nature has given me a passionate love for my dear country and people. We Finns—'

My companion's whispered explanations were here suddenly broken off by a startling noise. One of the wolves had howled, and I can assure you fellows that anything more horribly startling it has never been my lot to hear. The beast could scarcely have been two yards from us. Both my companion and I drew back, so close did the din appear to be, and somehow or other I contrived to catch my foot in the tail of my long sheepskin rug, and fell over backwards against the side of the *shalashka*.

The fir-branches—the smaller ones, that is, which were used to fill up the gaps between the uprights—gave way, and I found myself half-lying, half-sitting upon the bare ground, partly within the shelter and partly without.

With the quickness of thought my companion laid hold of my long boots, and began to haul at me.

'The wolves!' he cried.

Almost at the same instant every wolf in the small pack which had apparently surrounded the *shalashka* seemed to lift up its voice and howl aloud; the din was appalling, and I may fairly admit that I have never felt so frightened in my life as at that

moment. I heard a snarling and a rushing behind me, and there is no doubt that a wolf made a half-hearted grab at me, though I could not see what actually happened. But of one fact I am quite certain, that my peak-shaped fur cap came off at this particular moment, and that afterwards, when light came, only scraps of it were to be seen, torn and pulled about by the wolves.

My companion dragged me in, however, without further disaster, and for a few minutes we both stood panting and expectant, awaiting a possible rush from outside. Had the wolves, indeed, summoned courage at this moment to go for the gap which my fall had caused, undoubtedly several of them could have entered the *shalashka*, and both my friend and I might have had a scar or two to show as evidence of our night's adventure, though we should, no doubt, have beaten them off in the end.

But the courage of wolves grows very slowly. A wolf, as you know, is first of all a coward. While alone he remains a coward always, but when he is one of a company, and feels the support of companionship, he becomes a different creature. He begins to gather courage, and as hunger gradually increases, so does his pluck, until the moment comes when the desperate desire to eat assails him, and when this happens then there will be a fearless attack made, and woe to the human victim selected for attack, unless he has some good means of defence.

Presumably these wolves were very hungry. Spring nights in Russia are as cold, sometimes, as the coldest winter days; I have seen the thermometer at zero in the middle of March, and this night was intensely cold, and the wolves were proportionately famishing.

From this moment their daring increased, and no sooner did we make an attempt to patch up the gap in the side of our shelter than first one wolf, then another began to dart at the place, as though to grab us as we worked. One brute actually seized my companion's sleeve and hung on to it for a moment, but my gallant friend, who held his knife in his teeth ready for emergencies, contrived to administer so successful a jab at the neck of the brute that he let go, and went howling and snarling back.

But his friends were by no means dismayed by his misfortune. By twos and even by threes they began, with redoubled energy, to attack us. There was now no question of mending the gap. Both the Finn and I were busy with our knives, staving off the rushes of the now desperate brutes. Their attacks became fast and furious.

'It's no use, my friend,' I called out, after a few minutes of this. 'We shall be overwhelmed. I must shoot, and chance your police friends hearing it.'

'Try lighting a match,' he panted.

I lit a match, and, as though sudden death had fallen upon the entire wolf-tribe, not a sound of any kind broke the silence of night.

I kept the match burning as long as I could hold it, then I flung the last atom in the direction of the wolves. The final spark disappeared, and we waited. I had now picked up my gun.

'If they come again, I shall shoot,' I said. 'They are getting too dangerous.'

'Yes,' he agreed. 'After all, the police need not



"I was able to fire straight into a grey, grim, snarling brute."

suspect that the shot is fired by me. They don't know that I have a gun.'

For two or three minutes we were left in peace, and I began to think that a single match had put to flight a whole army of wolves, when suddenly

confidence seemed to return to the enemy; there was another abrupt howl from close quarters, and almost in the instant we found ourselves once more upon the defensive.

'Shall I try one more match,' I said, 'or shoot?'

I struck a second match.

This time the device failed. Our hungry enemy had already discovered that the sudden and mysterious bright light had done them no harm. They snarled and growled, and slunk to and fro, and dashed at us with scarcely an instant's pause.

'Take the box, light a match, and we will see what a shot will do,' I said, and the next moment, by the light thus given, I was able to fire straight into a grey, grim, snarling brute that came slinking forward and sprang at us. Instantly following the report, there was a sound of scuffling, the patter of many quickly-moving feet.

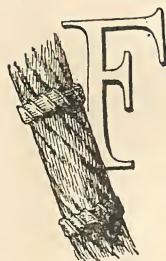
'They are off!' murmured my companion with a low laugh of satisfaction. 'The desperate rascals, I thought they had me once. Look at my coat-sleeve!'

'Yes, they are off,' I said; 'but not permanently, I should think. They will come and eat their friend who is shot, and probably we shall have another attack.'

(Concluded on page 410.)

INSTEAD OF THE SUN.

XII—ACETYLENE GAS AND MAGNESIUM WIRE.



FOR the last ten years a new illuminant has been coming rapidly to the front. This is a gas named acetylene, which is burned somewhat like coal-gas. It has already been applied in various ways, but it has proved, perhaps, most useful in the lamps of motors, carriages, and bicycles, where it yields a dazzling white light, far outshining the light obtained from oil or candles.

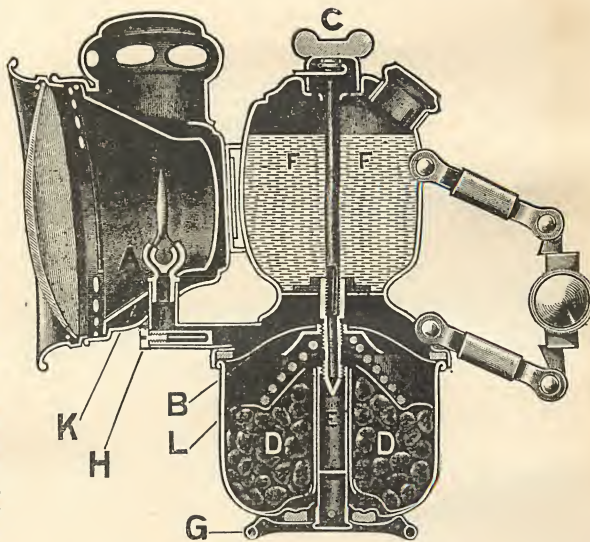
The chief novelty of the acetylene light is not so much the way in which the gas is burned as the manner in which it has been obtained. Under various names the gas has been known to chemists for some time, and they also knew that it burned with a bright but smoky flame. It was, however, a rather difficult gas to produce, requiring complicated apparatus, or a number of different operations for its manufacture. The inventors who have made acetylene gas a convenient and successful illuminant have laboured in two directions—firstly, to find some simple way of producing the gas; and, secondly, to discover a means of burning it without smoke.

In an acetylene lamp the gas is produced by allowing water to drop upon a grey, metal-like powder, known as calcium carbide. The water and the carbide unite to form two entirely different substances. One of these is lime, the other acetylene gas. The lime remains in the little cup at the bottom of the lamp, where the carbide is laid; but the gas is led along a pipe to a burner in the front chamber of the lamp, where it is lighted like a jet of ordinary coal-gas, and throws its beams out through the bull's-eye. By a suitable arrangement of burner it is now possible to burn the gas without creating smoke.

The invention of a suitable lamp, in which to

manufacture and burn acetylene gas, was but one of the many difficulties which inventors had to overcome. The making of the calcium carbide in large quantities, at a cheap cost, in order that the light might not be too expensive, was a task requiring much ingenuity and experiment. Calcium carbide is simply lime and carbon, or coke, melted or fused together. The heat which is required to make these substances unite is intense—so intense, in fact, that no ordinary furnace will suffice. Inventors have, therefore, made use of a special one, the electric furnace.

I have already described how, when a strong electric current jumps, as it were, from one carbon to another in an electric arc-lamp, a great light is produced. Not only is there a great light between the carbons, but there is also an intense heat, which will burn up or melt the most refractory substances. If, now, we take a very strong iron box, place a stout carbon rod through the bottom of it, suspend another inside the box from above, and pass a strong electric current through them, we have an electric furnace.



The "Motor Acetyphoto" Lamp, made by Joseph Lucas, Ltd., Birmingham.

It is in such a furnace that lime and coke are fused together to form lumps of calcium carbide.

In the illustration, A is the flame, formed of two converging jets, D the calcium carbide, F the water vessel: the water trickles through the tube E, which is regulated by the screw tap at C. The carbide expands in the space L, and generates the gas, which passes through B and along H till it comes out at the flame-opening. The flame is lit just as gas is. K is the reflector. The machinery is really simple, and is not difficult or dangerous to manage: the great thing is to keep everything absolutely clean.

For this illustration and for much information we are indebted to the makers of this patent lamp, Messrs. Joseph Lucas, Ltd., of Birmingham.

Photographers have sometimes to take photographs of underground or other dark places. For this purpose they require a strong, bright artificial light, which need not be always one of long duration. In fact, if the object to be photographed can be strongly illuminated for a few minutes, that is usually sufficient to allow as many negatives to be taken as are required. Under these circumstances the photographer often obtains the light which he requires by burning a piece of magnesium wire.

Magnesium is a soft, silvery metal, which is artificially prepared from a rock, named magnesium carbonate, by a series of chemical operations which are not very difficult to understand, but which it would take too long to describe. It was first manufactured about the year 1830 by a Frenchman, named Bussy. It is now made up in the form of narrow, flat strips, resembling watch-springs, and these are known as magnesium wire. The metal is, however, too brittle to be drawn out as ordinary iron and copper wire is, and the strips are really produced by putting the heated and soft magnesium into a very strong iron syringe, and forcing it out through a small hole, just as the icing of a sugar-cake is 'squirited' out of a tube.

Magnesium wire is easily lighted by placing the end of it in any ordinary flame, and the strip burns like a taper, leaving a white ash, which is magnesia. The light appears rather blue in tinge, and very much resembles that of the electric arc-lamp. It is found to be very good for photographic purposes, printing the negatives in the camera very quickly and clearly. Magnesium is also used in some kinds of fireworks.

The wire is, as a rule, simply held in the hand while it is being burned; but lamps have also been constructed, in order that it may be burned for a length of time without anything more than occasional attention. A magnesium lamp is always some combination of rollers, or wheels, which advance the ribbon of magnesium forward into the flame of a spirit-lamp, which keeps it alight. The movements of the ribbon are so regulated that it burns steadily and regularly, and there is usually some mechanism by which it may be moved more quickly or more slowly, as required. Some of the lamps are worked by hand, but the better ones are put in motion by springs, like the works of many clocks.

I have now told you something about the chief ways which men have discovered of providing themselves with artificial lights. Thousands have laboured to obtain these results, and the names of many of these toilers are lost. Few of them, perhaps, were aware how many benefits they were conferring upon their fellow-men. They thought only of bettering themselves. But it is usually true that the man who honestly and sturdily helps himself is just as surely helping others, since no man can entirely shut himself off from others. All these labourers, if we could but know them, are worthy of honour, and deserve our gratitude, because we reap the fruits of their toil; and, perhaps, we cannot show our gratitude better than by joining the great army of workers of all kinds who are seeking for still more light.

W. A. ATKINSON.

THE TWO BROTHERS.

MORE than a hundred years ago, two brothers were brought up together, named Richard and Edmund. They both appeared to be clever lads, but Richard was too fond of play, and often idle. They grew up at last to be men. Edmund rose so much that he became a Member of Parliament, and one of the most famous men in England. His speeches are said even now to be some of the grandest ever made. One day Richard was in the House of Parliament, London, listening to one of his brother's splendid orations, and he sat in silent thought for a time after the speech was finished. A friend who was by his side asked him what he was thinking about, and he replied: 'A little while ago I was wondering how my brother Edmund had contrived to get and display all the talents of our family; but now I know the reason. I recollect that when we were idling our time or playing, *he was always at work.*'

This little fact had made the great difference in after-life, and is the reason why Edmund Burke found a resting-place in the great Abbey at Westminster, where so many of England's illustrious dead are buried, while his brother Richard is hardly known or remembered by any one.

WAVELETS.

I SAW the little wavelets
Upon the ocean blue;
I knew, although they seemed to play,
They had a work to do.
They purify the waters
That else would stagnant grow,
And keep the ocean pure and sweet
By ceaseless ebb and flow.

And thoughts, like little wavelets,
Come flowing at their will;
They occupy my mind and heart,
And they are never still;
And if I only let them flow,
Like waves upon the sea,
A service they will surely give
Both sure and sweet to me.

DOORS, LOCKS, AND KEYS.

V.—A ROYAL BUNCH OF KEYS.

IT will probably surprise many *Chatterbox* readers to hear that one especial bunch of keys—and that one a commonplace-looking bunch of English keys—is treated with the respect usually reserved for kings and royalties. These highly honoured instruments have for their abiding-place the Tower of London.

Nowadays the common idea of the Tower is of a show-place wherein to spend a pleasant holiday afternoon: a vast enclosure full of strange things—men and horses in quaint and curious armour, a vaulted chamber gleaming with jewelled crowns and precious stones set in various forms and symbols, a smooth greensward where the famous ravens are to be seen. But in old times the Tower of London was no play-place, but as strong a fortress as kingly

will and expenditure could make it. Royal residence, political prison, grave of the ill-fated children of Edward IV., the story of the Tower is that of our country for many ages. Here have been confined the tender-hearted poet, Sir Henry Wyatt, and his pitiful pussy; Walter Raleigh, with his eager, restless spirit chafing behind the bars of his prison; Guy Fawkes, lingering in a rat-haunted dungeon; great-hearted patriots, unjust judges, blood-thirsty conspirators; and, saddest of all, the ill-fated Lady Jane Grey, who laid her dainty head upon the block close to the house in which the honoured bunch of keys has its residence.

The Tower of London is still guarded by a band of Yeomen or Beefeaters, as well as by a considerable force of soldiery, and from the latter every morning a certain number are chosen to serve as guards for the royal keys.

A little before midnight all through the year the word 'Keys!' shouted in loud tones, breaks the stillness, and, led by an officer, sleepy soldiers turn out, one carrying a lantern. Outside the constable's house a warder appears, wrapped on chilly nights in a long red cloak, and from his hand jangle the great massive keys. 'Present arms!' is the order, and away the procession starts on its rounds, the guardian of the keys marching a little ahead. The guard-house is soon reached, the whole guard turn out to salute, and a sentry cries, 'Halt! Who comes here?' and the warder answers, 'Keys.' 'Whose keys?' is the next query. 'The King's keys.' 'Stand!' orders the sentry. 'Advance one and give the countersign.' And this being done he proceeds, 'Pass, King's keys. All is well.'

About twenty yards further on the keys stop again to be saluted by the guardians of the jewel-house, and a few minutes later at Traitor's Gate, the entrance to the Tower in old times for prisoners brought down from Westminster. Then the procession goes on to the Byward Gate, guarded both by Yeomen and soldiers; then to the Spur Gate, and, finally, the Barrier Gate, which, being the outside entrance to the fortress, is first to be locked; and here the ceremony is altered. About twenty yards off the keeper of the keys halts, whilst the men of the guard form two lines, down which the keys are carried; then a corporal advances and locks the gate, which is well shaken to make sure it is safely closed. Next, arms are presented, the Beefeater carries his precious burden again to the front, the men re-form in marching order, and return to the Barbican or Spur Gate. Here the salute is slightly varied; on the gate being locked, the men say, 'God bless the King.' The Byward Gate is then fastened with the same ceremony, and finally the keys are taken back to their repose, from which they can on no account be disturbed until the ceremony of unlocking, which takes place in the early morning. Once the gates are locked, no human being, however high his rank, can leave the Tower, although the sergeant on duty may, on emergency, admit certain persons by keys put under his control. It is doubtful if any other pieces of metal in the world have enjoyed the dignity of so absolutely representing their sovereign that they receive the actual honour due to him himself.

HELENA HEATH.

THE LOCH OF THE SWORDS.

THE Scottish counties of Perthshire, Argyllshire, and Inverness-shire are said to meet in a small loch on the wild Moor of Rannoch. It is known by a Gaelic name signifying Loch of the Swords, and out of the fierce old days of clan warfare comes the following story as a reason for the title. There had been at one time a dispute between the Earl of Athole and Cameron of Lochiel on the question of their boundaries, and the two chiefs agreed to meet upon the shores of the lonely loch, each coming almost unattended, to discuss the matter amicably.

As Lochiel was on his way to the place of meeting, he was accosted by an old woman, who, with a significant air, asked him the question, 'Lochiel, Lochiel, where are your men?'

'I go on peaceful business,' replied the chief. 'I meet the Earl of Athole in all friendship, and leave my men behind, as he also will do.'

The old wife, however, was not to be satisfied. 'Where are your men, Lochiel?' she repeated, with such warning in her tones that the chief of the Camerons began to suspect treachery. Unwilling as he was to show any doubt of his neighbour's good faith, he decided not to be tricked if he could help it, and ordered a band of men, fully armed, to conceal themselves among heather, rocks, and bracken, with strict injunctions not to show themselves until he gave the word.

In due time the two chiefs arrived at the place of meeting, and Lochiel, seeing the Earl of Athole appear almost alone, felt for the moment ashamed of his suspicion. But in the course of the discussion differences arose. Hot words passed between the two, and suddenly, at a signal from the Earl, a band of Athole Highlanders, in full war array, appeared from a hiding-place behind their chief.

'How now? What are these?' exclaimed Lochiel.

'Athole wethers,' was the reply, as the Earl glanced proudly at this forcible argument on his own side.

For answer Lochiel gave his own signal, and in a moment the Athole men were matched by as many stalwart Camerons.

'What are these?' exclaimed the discomfited Earl.

'Lochaber dogs,' said Lochiel coolly, 'with teeth quite ready for the Athole wethers.'

Athole, seeing that his point was not to be gained so easily as he had hoped, had the wisdom to agree to a peaceful settlement, upon which Lochiel, drawing his mighty sword, flung it into the loch, vowing that, until it came to light, the agreement should stand. Athole followed suit, and, throwing his own sword after Lochiel's, promised that he too would abide by the settlement.

For long years since then the two great weapons have lain peacefully beneath the waters, until, in quite recent times, a lad, fishing on the loch, dragged to the surface a sword of ancient pattern. The old story was remembered, and the people of the neighbourhood, in terror lest the strife of bygone days should revive, insisted on the weapon being restored to its resting-place. So urgent were they that their demand was agreed to, and the swords of the two chiefs sleep with the ancient quarrel beneath the waters of the lonely loch.



"Lochiel flung his sword into the loch."



"I looked out after him as he went."

ROUND THE CAMP-FIRE.

VI.—BOBBY OLDFIELD'S 'GOOD DEED.'

(Concluded from page 405.)

MY friend, the Finnish refugee, and I (continued Bobby) seized the opportunity to patch up the side of our *shalashka* in case the wolves should return. Then we sat and waited. But they had gone for good.

Then the Finn fell to and ate. The light grew, and I could dimly see his face—a good face. Since I had told him of my nationality, he had spoken to me in English, with which he seemed quite familiar.

Soon he began his tale. 'They arrested most of the speakers at a Nationalist meeting, but I escaped by the back door. My wife saw the police coming, and warned me. I had a horse ready, and rode for two days and nights, till I found myself in these forests. Unfortunately snow fell from time to time, and the police were able to detect my line of flight. I am married; I think I have mentioned it. Do you know, my friend, that if I am caught before I can work my way round to a certain station beyond Wiborg, it is the most likely thing in the world that I shall never see my wife or child again!' His voice broke as he said the words.

My heart ached for the poor fellow. Just at that time the Russian police were, I knew, sternly set against the Finns.

'Then you must make certain of escaping,' I said.

'It is difficult,' he said, 'placed as I am. I have had a misfortune. Somehow, somewhere, I have dropped my pocket-book, which contains all the money which I had scraped up for our escape to Helsingfors and beyond, as well as other papers which I need. I am a journalist in Wiborg, and poor enough, but my wife and I have long feared interference from the police. We have saved enough to escape into Sweden—we *had*, that is. I was to wire to Hedvig, or write, appointing a day and hour for our meeting at Holm-yarvi. Now I have money neither for wiring nor for our escape. I spend all my time wandering about, looking for my pocket-book. I shall never find it. Possibly some Russian peasant has found me sleeping in the shed I spoke of, and has stolen it.'

'Look here,' I said. 'I am coming to my good deed. How much do you need for your escape into Sweden? I will lend you what you require.'

I took out my pocket-book. It so happened that I had nearly twenty pounds with me in notes and gold; I also had my passport.

'No, no; I am a stranger. You do not know me. How can you tell? I may be an adventurer.'

'Nonsense, man! I am well aware of all the risk,' I laughed. 'I am not a fool. Here, will fifteen pounds see you through? Give me your wife's address, and I will write to her to-day. Can you meet her at Holm-yarvi on Saturday?'

Well, my friend—his name is Svante Henriksen, by the way—protested and argued; but in the end I persuaded him. You would have trusted him yourselves if you had seen his face.

Finally, I persuaded him to accept the loan of my passport as well as of my money; it might, I pointed out, be useful in case of inquiries as to his identity.

But daylight was brightening with every moment, and it was obvious that the sooner my friend Svante departed, the more likely he would be to escape observation. He had actually seen Russian policemen yesterday, he told me.

I looked out after him as he went. In the grey of the morning the dead wolf looked weird and ghastly. In the distance a pair of black-cock knights were busily engaged in trying to kill one another; far away on the right cranes were shrieking their challenges from the marsh; the air resounded with the crooning of a thousand frogs; and in the dense woodland on the left the steps of Svante Henriksen died gradually away in the distance.

I re-entered the *shalashka*, and sat for an hour, hoping that a few black-cock might even yet return. Presently, when the sun was in the very act of rising, something happened.

I heard footsteps—human ones; presently two men reached the edge of the wood. They caught sight of the *shalashka*, and I saw one drag the other behind a juniper-bush. There, apparently, they consulted, for presently one of them crept back into the wood, and presumably went round among the trees until he reappeared opposite to his friend—that is, one was now on one side of the *shalashka*, the other on the further side. Then both advanced. It was perfectly plain that the fellows were police, and were after poor Svante, whom they hoped to catch—fast asleep, perhaps—in the *shalashka*.

I allowed them to approach, which they did noiselessly. When within twenty feet of the *shalashka* one of the men called out. 'Henriksen,' he cried out, 'the game's up; surrender!'

I put my head out, yawning, as though just awake. 'What is the matter?' I asked.

Well, it was as good as a play. The men were furious to find they had made a mistake. Who was I? What was I doing here?

'What are *you* doing here, rather?' I asked, 'wandering about woods which are rented for shooting by the Osterman Club?'

I assure you we had quite an argument.

'Then I conclude it was *your* tracks we followed,' they said, much dejected. 'We are, as a matter of fact, in search of a political refugee. You have seen no one,?'

'I did not say so,' replied I; 'on the contrary, I have seen a stranger; he was running away from the wolves. He called in at the *shalashka*; he—'

'Why,' exclaimed one of them, 'this may be the very fellow we are after!'

'I should think it highly probable,' I replied.

The gendarme stamped his foot with annoyance. 'Was he like this?' he asked, suddenly producing a really excellent portrait of my visitor.

'The very image,' I replied. 'He went away—oh! an hour and a half ago.'

'In which direction?'

'I do not know,' I answered. It was quite true. I had been careful not to watch his retreat very far.

The two men consulted rapidly. Then, seeing

that they could not hope for more information, they left me hurriedly without farewell.

I returned to St. Petersburg later, and, instead of writing to Madame Hedvig, I actually took train to Wiborg, and interviewed her. I thought it safer to do so. Her delight to hear my news and her gratitude were rather touching; and I am happy to say her husband won through safely. I have seen him many times since—free, in Sweden.

THE SUN-DIAL.

I SAW the quaint old dial face,
And as the bright sun ran its race,
The moving shadow that it cast
Marked one by one the hours that passed;
And by the dial might be told
How the swift moments onward rolled.

So may the heart within its place
Be like unto that dial face:
From day to day a register
Of deeds and words and actions fair,
As the swift hours onward move,
Still registering each deed of love.

PICTURES AND THEIR PAINTERS.

From the Wallace Collection, London.

VIII.—ROSA BONHEUR.

SOME seventy years ago visitors to the galleries of the Louvre, in Paris, would notice, among the students, a young girl with a strong, thoughtful face, busily engaged in copying the fine studies of cattle by Paul Potter. This was Marie Rosalie (generally known as Rosa) Bonheur, the daughter of an artist, who, finding little sale for his pictures, supported himself and his four children by teaching drawing. His own experience had not encouraged him to let his children take up art as a profession, though all four inherited his talent, and Rosa especially was the pride of her school when drawing prizes were to be won, and, as her biographer says, valued her exercise-books chiefly for the sake of their blank pages. When she left school her father tried to start her as a dressmaker, but her natural bent was too strong, and it must surely have been a relief to Monsieur Bonheur when he decided to give up the struggle and take his daughter as a pupil.

He was the only teacher she ever had, and it is very pleasant to read the letters which tell of his delight in her developing talent, and his pleasure at seeing her unspoilt by the praise she received. One can fancy how the girl must have rejoiced to add a little to the slender income of the family by the sale of her copies, and so repay in some measure the father who had given her the desire of her heart. Already she was showing, by her love for those great solid bulls of the Dutch painter, that talent for animal-painting which was to make her famous. Soon she was not content with copying other people's work, and we find her making friends with a farmer a little way out of Paris, and getting permission to study from the life the sheep and cattle on the farm, delighting the good farmer's wife by presenting her with the portrait of a favourite cow.

In the year 1841, when Rosa was nineteen, her pictures first appeared in the Salon, a group of sheep and goats, and some home pets of her own, two rabbits nibbling at a carrot. But her home pets soon included bigger beasts than rabbits. The bleating of sheep and goats was sometimes to be heard from the windows of the sixth floor in Paris where she and her family lived. A stable adjoined the studio, so that Rosa had every opportunity for that careful study of her subjects which has made her pictures so real and living. We cannot help wondering at the forbearance of the rest of the family, who had to share the house with these lively models; but the brothers and sisters were all interested in the work, and there seems to have been a perfect understanding between them. We have pleasant accounts of the happy gathering in the evening when work was done, when one of the family would read Scott's novels aloud, while Rosa's pencil made sketches of the scenes and characters in the story. She had always been attracted by the old days of chivalry, and even after she began her life-work in her father's studio, would throw down pencil and brush for a game with her young brothers, in which, with palettes for shields, they tilted at each other like the knightly champions of old time.

In the year 1848 each member of the Bonheur family exhibited something, either painting or sculpture, in the Salon, but the following year Monsieur Bonheur died, after being for some time in bad health, which did not, however, interfere with his keen interest and delight in his daughter's work. Her famous picture of the team of strong, patient oxen ploughing was finished shortly before his death, to his great satisfaction.

Rosa Bonheur's life was varied by occasional visits and tours in the country, where she could study her beloved animals among more natural surroundings than in Paris. She had an odd experience once when sketching in the strange, weird plain of the Landes, where the ignorant country folk, who had never seen a lady painting before, attacked her as a witch, practising magic arts on their sheep and cattle. She also visited England, where the deer in Windsor Park delighted her; and Scotland, where she made spirited sketches of cattle and ponies.

Perhaps her best-known picture is the famous 'Horse Fair,' now at New York. It was when painting this picture that the artist first wore male attire, that she might go without attracting attention among the dealers in the markets. Her paintings now commanded large prices, and she was able to make a beautiful home for herself in a château near Fontainebleau, where her latter years were almost entirely spent. It was easier now than in the old days, on the sixth floor in Paris, to surround herself with the models she loved. Dogs, like the wise-eyed, watchful sheep-dog in our illustration, cattle, chamois, even lion cubs, went to make up her menagerie. Distinguished members of her own profession delighted to visit her, and the Empress Eugénie gave her with her own hands the Cross of the Legion of Honour. She died in 1899, one of the most famous of women painters, a powerful, sympathetic interpreter of the dumb sitters whom she studied so thoroughly and loved so well.



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